

Order of Curriculum Presented with Newark Charter School  
Application for Charter Modification  
December 2011

Curriculum Maps

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	American Literature	A-18
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Social Studies:	World Geography and Cultures	C-1
	Civics, Citizenship, and Economics	C-18
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## Instructional Units

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	Fact or Fiction: Alcohol & Tobacco	Gr.9-12	N-128

# Curriculum Framework for Elements of Literature 1

School: Newark Charter School

Curricular Tool: Holt McDougal Literature

Grade : 9

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
<b>Unit One: The Plot Thickens: Narrative Structure</b> <b>Timeline: 4 weeks</b>			
CC 9-10 RL 1 CC 9-10 RL 3 CC 9-10 RL 4 CC 9-10 RL 5 CC 9-10 RL 7 CC 9-10 RL 10 CC 9-10 W 3b CC 9-10 W 3d CC 9-10 W 5 CC 9-10 W 9a CC 9-10 W 9b CC9-10SL4 CC9-10SL6	<p>Authors make choices that create mood and tone (e.g., how to structure a text, order events within it, and manipulate time)</p> <p>Authors/artists make unique choices to convey meaning to their audience(s).</p> <p>Authors choose a specific genre to convey meaning.</p> <p>Good readers' and viewers' understanding of an artistic media is influenced by the unique choices the authors and artists make.</p>	<p>What is conflict?</p> <p>How does conflict influence plot?</p> <p>How does conflict inspire/prevent character development?</p> <p>What is the author's purpose?</p>	<p>Comparing Texts:  <i>A Sound of Thunder</i>  <i>From Here to There: The Physics of Time Travel</i></p> <ul style="list-style-type: none"> <li>Students will analyze plot and compare stories through analytical writing.</li> </ul> <p><i>The Most Dangerous Game</i></p> <ul style="list-style-type: none"> <li>Reread lines 473-484. Connell does not reveal the main conflict until a good deal of the story has passed. Why? Support your answer with details from the text.</li> </ul> <p><i>Daughter of Invention</i></p> <ul style="list-style-type: none"> <li>What do you learn about the narrator from the way she resolves the conflict with her father? If she had acted differently, how might the conflict have been resolved?</li> </ul> <p><i>The Rights to the Streets of Memphis</i></p> <ul style="list-style-type: none"> <li>In an autobiography, the writer must choose which life experiences to choose and which to leave out. In your opinion, why did Wright choose to share this particular episode in his life? Support your opinion with evidence from the text.</li> </ul> <p>Writing a Personal Narrative and Presenting in a Speech</p> <ul style="list-style-type: none"> <li>Write a personal narrative in which you describe for a specific audience a meaningful experience in your life. Make sure to narrate the events of the experience and to reflect on its significance</li> <li>Adapt your personal narrative to create a 3-5 minute informal speech, and then present it to your class.</li> </ul> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>Ongoing informal assessment through discussion and</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
			observation <ul style="list-style-type: none"> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
<b>Unit Two: <i>Of Mice and Men</i> (Model Unit)</b> <b>Timeline: 5 weeks</b>			
CC 9-10 RL 1 CC 9-10 RL 2 CC 9-10 RL 3 CC 9-10 RL 4 CC 9-10 RL 5 CC 9-10 RL 8 CC 9-10 RL 9 CC 9-10 RL 10 CC 9-10 W 9a CC 9-10 W 9b CC 9-10 W 3a CC9-10SL1 CC9-10SL1a CC9-10SL1c CC9-10SL1d CC9-10SL4 CC9-10SL6	<p>Authors place their characters in believable situations, where they face difficult decisions. The solution to a problem often reflects the values of the era.</p> <p>A writer’s word choice and syntax are characteristics of voice that help to personalize text.</p> <p>Reading helps us form our opinions.</p> <p>Great literature provides rich and timeless insights into the key themes, dilemmas, and challenges that we face. It presents complex stories in which the inner and outer lives of human beings are revealed.</p>	<p>How does an author make characters seem real? Can a wrong action ever be right?</p> <p>What responsibility do we have for each other’s welfare?</p>	<p><i>IT’S MY LIFE!</i> - Imagine you are one of the characters in <i>Of Mice and Men</i>. Create a scrapbook that depicts your life before, during and after the time portrayed in this novel. This scrapbook should reflect major events, feelings and relationships in your life -- those that were revealed in the book and those that may have happened before or after the events of the book. The end result should provide an image through which those close to you can really come to “know” you as a person. This scrapbook can contain pictures, mementos, journal entries, captions or other appropriate memorabilia. This task will be cap-stoned by your presentation of the scrapbook to the class, speaking as your character. Your understanding will be assessed by the attached rubric.</p> <p><i>WHOSE BEST INTEREST?</i> - Imagine you are a member of a town council. The council is facing a difficult zoning decision. A new prison will be constructed in your town. The town council must select the best location for this prison from among four available sites in the town: next to a nursing home, next to an elementary school, on the marshlands near the town park, or in the neighborhood where you live. As a council member, you will be attending an upcoming meeting, during which each council member must present his recommendation for the site to be selected. Write a speech advocating your choice of site for the prison and supporting your thinking.</p> <p>Other Assessments:            Character Notes graphic organizer            Three-Column Notes (Use of Language in <i>Of Mice and Men</i>) organizer            Personal Response Essay (See holistic rubric in appendix for evaluating these personal responses.)            Persuasive speech to the jury (See adapted Delaware State General Rubric for Writing in appendix for use with this</p>

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			assessment.) Character Interview Responses - Each student in the class will select an interview question for his/her chosen character to explore. Writing as that character, they will create a possible response to the question. They will be writing in the first-person point of view, as that character. They will use everything they understand about the character (the character's thinking, his/her motivation, his/her way of expressing himself, etc.) to help them formulate a response to the question.
<b>Unit Three: A Sense of Place: Setting Mood and Imagery</b> <b>Timeline: 4 weeks</b>			
CC 9-10 RL 4 CC 9-10 RL 5 CC 9-10 RI 1 CC 9-10 RI 2 CC 9-10 RI 4 CC 9-10 RI 6 CC 9-10 W 2b CC 9-10 W 3a-e CC 9-10 W 4 CC 9-10 W 5 CC 9-10 W 10 CC 9-10 SL 2 CC 9-10 SL 5 CC9-10SL3	Reading expands understanding of the world, its people and oneself.  Readers use strategies to construct meaning.	What are readers thinking about as they read?  Why do people read?	<p><i>Through the Tunnel</i></p> <ul style="list-style-type: none"> <li>• What does Jerry's swim through the tunnel symbolize? Cite descriptions of the tunnel, its connection to the older boys, and Jerry's feelings about the tunnel to support your answer.</li> </ul> <p><i>from A Walk in the Woods</i></p> <ul style="list-style-type: none"> <li>• What elements of setting most strongly contribute to the mood in this selection? Consider the time of day, the season, the weather and the natural landscape. Cite details from the text to support your answer.</li> </ul> <p><i>Wilderness Letter</i></p> <ul style="list-style-type: none"> <li>• Stegner makes a point of distinguishing between the recreational value of the wilderness and its value as a source of spiritual renewal. Do you agree that this is an important distinction? Include specific references from the text to support your answer.</li> </ul> <p><i>Writing a Short Story and Producing a movie trailer</i></p> <ul style="list-style-type: none"> <li>• Write a short story in which you develop characters, a setting, plot, conflict, resolution and theme. You can use real-world or imagined events, issues or people to inspire your story.</li> <li>• Create a story trailer that introduces potential readers to your short story.</li> </ul> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and</li> </ul>

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			observation <ul style="list-style-type: none"> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
<b>Unit Four: <i>Hamlet</i></b> <b>Timeline: 4 weeks</b>			
CC 9-10 RL 2 CC 9-10 RL 4 CC 9-10 RL 5 CC 9-10 RL 9 CC 9-10 RL 10 CC 9-10 W 4 CC 9-10 W 5 CC 9-10 W 6 CC 9-10 SL 1c CC 9-10 L 2c CC 9-10 L 4a-d CC9-10SL2 CC9-10SL5	<p>Themes are the fundamental and often universal ideas explored in a literary work.</p> <p>Motifs are recurring structures, contrasts, and literary devices that can help to develop and inform the text’s major themes.</p> <p>Symbols are objects, characters, figures, and colors used to represent abstract ideas or concepts.</p> <p>In the past, our society has typically looked down upon the mentally ill and subjected them to discrimination, abuse, neglect, subjugation, and rejection.</p> <p>Care for individuals with mental illnesses has drastically improved since the time when the book was written (1962), although some negative attitudes toward the mentally ill persist.</p> <p>Society and its institutions have an obligation to treat members fairly and humanely.</p> <p>Embracing individualism may</p>	<p>In what ways can motifs affect theme the theme of a text?</p> <p>How does structure affect the meaning/interpretation of a text?</p> <p>Why do authors use symbols in writing?</p> <p>How does the use of symbolism differ through time and culture?</p> <p>What is society's responsibility toward individuals with mental illnesses?</p> <p>How have our views and practices regarding that obligation changed over time?</p> <p>What is the purpose of conformity?</p> <p>When should individuals conform, and when should they rebel?</p>	<p><b>Concept Web.</b>            Ask students to work independently or in small groups to create a word web or other graphic organizer that explores one or more of the following concepts: fate, revenge, ambition, guilt. You might encourage students who are having difficulty in getting started to define the concept, give examples that illustrate it, and list their personal reactions to the concept.</p> <p><b>Role-Playing.</b>            Have students discuss or role-play the following situation. Ask them to imagine that they feel guilty about a crime they have committed. They want to have peace of mind, but they are unwilling to give up what they gained from their crime. Have students role-play a discussion of their situation with a psychologist or spiritual advisor.</p> <p><b>Mourning Practices.</b>            Initiate a discussion about mourning in <i>Hamlet</i>. Claudius complains that Hamlet grieves for too long, and Hamlet complains that Laertes grieves too loudly. In this project, students will give oral reports on mourning practices in different cultures.</p> <p><b>Symbolism</b>            Analyze this importance of Yorick’s skull in the play. How does the death of Yorick impact Hamlet? Imagine Hamlet had not discovered the former jester’s skull in the graveyard; write a one page analysis of how the play might have been different.</p>

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	come at a price; however, it may also ultimately be the best way to change corrupt societies and institutions.		
<p>Differentiation for Advanced learners: Using <i>One Flew Over the Cuckoo's Nest</i> explore the nature of theme, motifs and symbolism. Sample task: 1. You are a journalist who has been asked by your editor to write an update to Ken Kesey's expose of the mental health industry. You must research the history of mental health care in the U.S. and other western countries and determine what kind of progress has been made since the death of Randle P. McMurphy in the late 1950's in an Oregon mental health facility. In order to accomplish this task, you must go undercover as a mental patient, recording your thoughts and experiences in a journal. You will use this journal to write your update article.</p>			
<p><b>Unit Five: Taking Sides: Argument and Persuasion</b>  <b>Timeline: 5 weeks</b></p>			
<p>CC 9-10 RI 2  CC 9-10 RI 3  CC 9-10 RI 4  CC 9-10 RI 6  CC 9-10 RI 8  CC 9-10 RI 9  CC 9-10 W 1a-e  CC 9-10 W 4  CC 9-10 W 5  CC 9-10 W 9  CC 9-10 SL 1  CC 9-10 SL 3  CC 9-10 SL 4  CC 9-10 SL 6</p>	<p>Authors use a variety of means to persuade an audience.</p> <p>The audience can dictate the appropriate means of persuasion.</p>	<p>How do the beliefs/behaviors of others affect your own beliefs/behaviors?  How do the media and other outside influences shape our values and beliefs?  How do we make decisions for ourselves?</p>	<p><i>I Have a Dream</i></p> <ul style="list-style-type: none"> <li>Using a graphic organizer, list at least three examples of racial injustice that King uses as effective support for his claim that African Americans are not free.</li> <li>How would you account for the extraordinary acclaim King's speech has received, not only when it was first delivered, but years later? Write a three to five paragraph analysis of the effectiveness of King's address. Consider both the strength of its logic and its emotional power.</li> </ul> <p><i>Testimony Before the Senate</i></p> <ul style="list-style-type: none"> <li>Fox concludes his testimony by describing two contrasting visions of his future. What emotion does each vision create? What is the effect of concluding his speech with this emotional appeal?</li> </ul> <p><i>How Private is Your Private Life? / The Privacy Debate One Size Doesn't Fit All</i></p> <ul style="list-style-type: none"> <li>Does Andrea Rock rely more on fact or opinion in making her case? What about Arthur M. Ahalt? Do the opinions you identified tend to be substantiated? Cite evidence from the text to support your answers.</li> </ul> <p>Write a Persuasive Essay/Debate an Issue</p> <ul style="list-style-type: none"> <li>Write a persuasive essay that asserts a claim, or position, on an issue. Support your claim with reasons and evidence that will convince your audience to act or think a certain way.</li> <li>Participate in a debate over a substantive issue involving</li> </ul>

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			<p>your school or community.</p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
<p><b>Unit Six: 1984</b>  <b>Timeline: 4 weeks</b></p>			
<p>CC 9-10 RL 2  CC 9-10 RL 3  CC 9-10 RL 4  CC 9-10 L 2  CC 9-10 L 3  CC 9-10 W 2b  CC9-10SL1  CC9-10SL1a  CC9-10SL1b  CC9-10SL1c  CC9-10SL1d</p>	<p>Literature can reveal the truth.</p> <p>The role of government has implications on all aspects of life.</p> <p>Symbolism is used to convey meaning.</p>	<p>How does literature reveal truths?</p> <p>How can a work of literature be relevant years after original publication?</p> <p>How does the implication of government affect society?</p>	<p><b>Keeping a Diary.</b>  Ask students whether they keep or have ever kept a diary, and then discuss the purpose of a personal diary. Explain that the main character in <i>1984</i>, Winston Smith, starts to keep a diary, which in itself is a political act of rebellion. Suggest that as they read Part One, students keep a diary to exercise their privacy and freedom of expression and also to understand Winston's process of self-awakening that the diary begins.</p> <p><b>Tapping Prior Knowledge: The Role of Government.</b>  Begin by asking students to think about the word <i>government</i>. Have students work in small groups to answer the following questions: Who or what is government? What does—or what must—government do? What different kinds of governments are in the world today? How does government affect you personally? Ask students as a class to share the information gathered in their groups. If time permits, have volunteers share stories about dealing with government agencies.</p> <p><b>Communism in the United States.</b>  Have your students find out about the Communist Party in the United States: its beginnings, its history, its key personalities, membership during the Stalin era, the McCarthy years, and the party today. Instruct them to combine what they learn into a report.</p>
<p>Differentiation: Option 1: Instead of <b>Communism in the United States</b> have students complete <b>Communist Leaders</b>. Instruct students to research one of the key personalities in world communism: for example, Karl Marx, Vladimir Lenin, Leon Trotsky, Joseph Stalin, Fidel Castro, Alexander Dubcek, Mikhail Gorbachev, Eric Honecker, Wojciech Jaruzelski, Mao Zedong, Ho Chi Minh, or Pol Pot. Have them write a biographical sketch that includes a discussion of how the life or ideas of this leader relate to <i>1984</i>.</p>			

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Option 2: Use the novel <i>The Firm</i> by John Grisham to teach persuasion and the potential dangers of government.			
<b>Unit Seven: A Way with Words: Author’s Style and Voice</b> <b>Timeline: 4 weeks</b>			
CC 9-10 RL 4 CC 9-10 RL 5 CC 9-10 L 3 CC 9-10 L 4 CC11-12SL3	<p>Authors use different techniques to create style and voice within a text.</p> <p>The voice an author chooses to use dictates the mood or theme of a story.</p>	<p>How does one recognize and create a distinctive voice and style?</p>	<p><i>Where Have You Gone, Charming Billy?</i></p> <ul style="list-style-type: none"> <li>Find examples in the text that illustrate each element of style. Explain how O’Brien’s use of realism contributes to the reader’s perceptions of Paul and his situation.</li> </ul> <p><i>The Naked Soldier/Be a Marine</i></p> <ul style="list-style-type: none"> <li>What insight into O’Brien’s fictional work might a reader gain from “Tim O’Brien: The Naked Soldier”? Support your answer with evidence from the interview.</li> </ul> <p><i>Going to Japan</i></p> <ul style="list-style-type: none"> <li>Review the bulleted list of humorous techniques on page 853, and think about how Kingsolver uses humor to communicate her perspective. In your opinion, which technique best helps Kingsolver to convey her thoughts and feelings in a funny way? Use examples from the text to support your answer.</li> </ul> <p><i>A Few Words</i></p> <ul style="list-style-type: none"> <li>Describe Oliver’s overall tone in this essay. As a reader, can you tell something about her attitude toward nature? Explain your answer citing evidence from the text as support.</li> </ul> <p><i>A Narrow Fellow in the Grass/ “Hope” is the thing with feathers—</i></p> <ul style="list-style-type: none"> <li>Identify one example of slant rhyme. What other distinctive features of Dickinson’s style can you see in this poem? Cite evidence from the poem to support your answer.</li> </ul> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>Ongoing informal assessment through discussion and observation</li> <li>Teacher made comprehension tests</li> <li>Note taking and graphic organizers</li> <li>Additional Text Analysis questions from the text.</li> </ul>

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<b>Unit Eight: Conflict and Soldiers</b> <b>Timeline: 5 weeks</b>			
CC 9-10 RL 1 CC 9-10 RL 2 CC 9-10 RL 3 CC9-10 W 7 CC 9-10 W 8 CC 9-10 W 9	<p>People rely on a variety of resources to obtain information.</p> <p>New information may result in a new idea or a change of stance.</p>	<p>How do different cultures define courage and heroism?</p> <p>How is information organized?</p> <p>Why is information organized in different ways?</p>	<p>In "The Things They Carried," O'Brien writes that "Men killed, and died, because they were embarrassed not to" (21). Find three characters from the assigned stories and explain how their actions, attitudes, and beliefs reflect O'Brien's point of view in regards to such issues as masculinity, cowardice and courage. What are your conclusions regarding the issues O'Brien raises? Use plenty of examples from the stories to support your point.</p> <p>Using MLA format write a 3-5 page research paper on the mental effects of the Vietnam War on our soldiers. Incorporate themes, ideas, and information from <i>The Things They Carried</i> into your research. Your paper must include a title page, body of your essay and reference page.</p>
<b>Unit Nine: From Writer to Reader (Model Unit)</b> <b>Timeline: 3 weeks</b>			
CC 9-10 RL 2 CC 9-10 RL 4 CC 9-10 RL 6	<p>Often the intent of an author of fiction is to expose the truth about human nature.</p> <p>Readers are able to recognize their own thoughts and behaviors in literary characters.</p> <p>Prior experiences influence a reader's perceptions and insights about their reading: As a result, a reader's response to text is an individually unique experience.</p> <p>Great literature provides rich and timeless insights into the key themes, dilemmas, and challenges that we face. It presents complex stories in which the inner and outer lives of human beings are revealed.</p>	<p>How can a literary piece of text reveal truth?</p> <p>How does literature reveal us to ourselves?</p> <p>How do a reader's experiences influence his/her response to text?</p>	<p><b><i>That was then - This is now . . .</i></b></p> <p>You are a freelance writer who is interested in submitting a piece of your original writing to the literary magazine, <b><i>Personal Reflections</i></b>. You have been informed that an upcoming issue of the magazine will feature poems, song lyrics, narratives, and reflection journals which deal with insights about human nature at various stages of a human being's development. You have decided to create a literary piece (a poem, a song, a narrative, or a reflection journal) which expresses an insight you have about individuals in a particular stage of their growth, and then submit it to the Editorial Board of that magazine for approval. You will need to determine the genre in which you wish to work, the point of view from which you will write, and the ways in which you will convey your insight. You will want to consider how the point of view you selected will impact on the insight you want to express, as well as how it will affect the readers of the magazine. You will also want to be sure that you develop any characters (including the speaker/narrator) so that their words, actions, and feelings contribute to the expression of the insight about human nature.</p> <p>Additional Assessments:  <i>Character Development Organizer</i>—for the story, "Checkouts"</p>

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			<p>(See Appendix.)</p> <p><i>Quizzes</i>—on use of context clues to determine meanings of unfamiliar words and identification of point of view</p> <p><i>Unit Assessment</i>—on use of context clues to determine meanings of unfamiliar words, the influence of point of view on a reader, and methods of character development with a new reading selection (“The Crush”) (See Appendix.)</p>

## Curriculum Framework for Elements of Literature 2

School: Newark Charter School

Curricular Tool: Holt McDougal Literature

Grade : 10

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
<b>Unit One: The World of a Story: Plot, Setting and Mood</b> <b>Timeline: 4 weeks</b>			
CC 9-10 RL 1 CC 9-10 RL 3 CC 9-10 RL 4 CC 9-10 RL 5 CC 9-10 RL 10 CC 9-10 W 3b CC 9-10 W 3d CC 9-10 W 5 CC 9-10 W 9a CC 9-10 W 9b CC11-12SL3 CC11-12SL6	<p>Authors make choices that create mood and tone (e.g., how to structure a text, order events within it, and manipulate time)</p> <p>Authors/artists make unique choices to convey meaning to their audience(s).</p> <p>Authors choose a specific genre to convey meaning.</p> <p>Good readers' and viewers' understanding of an artistic media is influenced by the unique choices the authors and artists make.</p>	<p>What is conflict?</p> <p>How does conflict influence plot?</p> <p>How does conflict inspire/prevent character development?</p> <p>What is the author's purpose?</p>	<p><i>Harrison Bergeron</i></p> <ul style="list-style-type: none"> <li>Summarize the main conflict in "Harrison Bergeron." How is this conflict resolved? How does the resolution help to make the story successful?</li> </ul> <p><i>Everyday Use</i></p> <ul style="list-style-type: none"> <li>Explain why Mama makes the choice she does t the climax of the story. How does she feel about her choice?</li> <li>Explore the various ways that Dee is in conflict with her family. Which conflicts are resolved, which are not?</li> </ul> <p><i>To Build a Fire</i></p> <ul style="list-style-type: none"> <li>In what ways does the setting act as an antagonist of the man? How do the conflicts he faces create tension?</li> </ul> <p><i>from The Johnstown Flood</i></p> <ul style="list-style-type: none"> <li>Describe the overall mood McCullough creates in his account of the Johnstown flood. How do the diction, syntax, and imagery used by the author help create this mood? Which passages are most effective?</li> </ul> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>Ongoing informal assessment through discussion and observation</li> <li>Teacher made comprehension tests</li> <li>Note taking and graphic organizers</li> <li>Additional Text Analysis questions from the text.</li> </ul>
<b>Unit Two: Canterbury Tales</b> <b>Timeline: 3 weeks</b>			
CC 9-10 RL 1 CC 9-10 RL 2 CC 9-10 RL 3	<p>Human nature changes very little over time.</p>	<p>How do stereotypes and archetypes inform our understanding of humanity?</p>	<p><b>The Life of Becket.</b>            Instruct students to find out more about Thomas â Becket and his shrine at Canterbury. Have them present their findings in a biographical essay</p>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
CC 9-10 RL 4 CC 9-10 RL 5 CC 9-10 RL 8 CC 9-10 RL 9 CC 9-10 RL 10 CC 9-10 W 9a CC 9-10 W 9b CC 9-10 W 3a CC9-10SL2 CC11-12SL4 CC11-12SL5	<p>Stereotypes and archetypes help us to make sense of our world by enabling us to predict how people will behave.</p> <p>Old English was influenced by the introduction of French after William the Conqueror became king of England and developed into Middle English.</p> <p>Living languages change according to custom, usage, and the influence of a variety of factors.</p>	<p>How are Chaucer's Canterbury pilgrims relevant to society today?</p> <p>How does the development of the English language reflect a changing British culture?</p> <p>Why do languages change over time?</p>	<p>on Becket's life, achievements, and the importance of his shrine as a place of pilgrimage.</p> <p><b>The Chivalrous Code</b>            Point out to students that Chaucer wrote for a courtly audience that was familiar with such traditions as the code of chivalry. Have students use textbooks, the library, or the internet to find out more about this tradition and its influence upon the literature of the Middle Ages. Instruct them to write a short feature article to share their findings.</p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
<p><b>Unit Three: Word Portraits: Character Development</b>  <b>Timeline: 4 weeks</b></p>			
CC 9-10 RL 1 CC 9-10 RL 2 CC 9-10 RL 3 CC 9-10 RL 4 CC 9-10 RL 5 CC 9-10 RL 6 CC 9-10 RL 10 CC 9-10 W 4 CC 9-10 W 5 CC 9-10 W 3a – e CC11-12SL3 CC9-10SL4	<p>Authors place their characters in believable situations, where they face difficult decisions. The solution to a problem often reflects the values of the era.</p> <p>A writer's word choice and syntax are characteristics of voice that help to personalize text.</p> <p>Reading helps us form our opinions.</p>	<p>How does an author make characters seem real?</p> <p>Can a wrong action ever be right?</p> <p>What responsibility do we have for each other's welfare?</p> <p>How does conflict impact character development?</p>	<p><i>The Possibility of Evil</i></p> <ul style="list-style-type: none"> <li>• The narrator offers more than one reason for Miss Strangeworth's secret activity. Do you think her main motivation is to address a moral dilemma – or is it something else? Use a graphic organizer to answer.</li> </ul> <p><i>Like the Sun</i></p> <ul style="list-style-type: none"> <li>• In “The Possibility of Evil” and “Like the Sun,” the main characters both hold a moral position that brings them into conflict with their communities. Compare and contrast the ways they respond to their moral dilemmas. Do you think they make the right decisions? Why or why not?</li> </ul> <p><i>The Teacher Who Changed My Life</i></p> <ul style="list-style-type: none"> <li>• Give examples of how Gage uses words/actions, physical appearances, and comments to convey Miss Hurd's personality. Which method gives you the most vivid impression of Miss Hurd? Use evidence from the text to explain your answer.</li> </ul> <p><i>The Gift/Those Winter Sundays</i></p>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
			<ul style="list-style-type: none"> <li>List traits that describe the father in each poem. Then write a paragraph that describes and compares both characters.</li> </ul> <p><i>A Marriage Proposal</i></p> <ul style="list-style-type: none"> <li>How does Natalia cause Lomov’s main trait or pattern of behavior to become even more exaggerated in the course of the play?</li> </ul> <p>Write a Short Story that is centered on an event or experiences that you find interesting. Use sensory language, dialogue, and suspense to develop the story’s setting, characters plot, mood and theme. Students do an oratory presentation of a scene from their story that exemplifies their use of sensory language, dialogue or suspense.</p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>Ongoing informal assessment through discussion and observation</li> <li>Teacher made comprehension tests</li> <li>Note taking and graphic organizers</li> <li>Additional Text Analysis questions from the text.</li> </ul>
<p><b>Unit Four: My Antonia</b>  <b>Timeline: 4 weeks</b></p>			
CC 9-10 RL 1 CC 9-10 RL 3 CC 9-10 RL 4 CC 9-10 RL 10 CC 9-10 W 7 CC 9-10 W 8 CC 9-10 W 9 CC11-12SL1 CC11-12SL1a CC11-12SL1d CC11-12SL3 CC11-12SL6	<p>Reading expands understanding of the world, its people and oneself.</p> <p>Authors use a variety of techniques to develop conflict in realistic ways.</p>	<p>How does the setting impact a story?</p> <p>What techniques does an author use to describe a setting?</p> <p>How do readers make connections to text?</p>	<p><b>A Road Map.</b>            Have students study geographical maps of the United States. Encourage students to discuss the geographical landforms Jim encounters, and the difficulties they present, when he travels from New York to Nebraska. Students can create a road map of Jim’s trip at the end of the book, labeling important locations such as New York, Boston, Lincoln, and other Nebraska towns such as Red Cloud (Cather’s hometown and the basis for Black Hawk).</p> <p><b>A Bohemian Life</b>            Have students reread the excerpts about Mr. Shimerda in Book One. Then instruct them to do research on Bohemians and their way of life in the old country. Have them write a research paper, giving information about the land, occupations, foods, recreation, and special skills or interests of the people. They might want to conclude with a paragraph explaining why Mr. Shimerda had such a difficult time adjusting to life on the prairie.</p>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
			<p><b>Pioneering Women.</b> Willa Cather portrays the lives of a number of the women who settled on the prairie farms and towns. Have students research original documents, letters, and journal entries of women who moved west with the Homestead Act of 1862. Instruct them to prepare and present a sample of statements in an oral report.</p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
<p><b>Unit Five: Why Write: Author's Purpose</b> <b>Timeline: 4 weeks</b></p>			
<p>CC 9-10 RI 2 CC 9-10 RI 3 CC 9-10 RI 4 CC 9-10 RI 5 CC 9-10 RI 6 CC 9-10 RI 7 CC 9-10 W 1 CC 9-10 W 4 CC 9-10 W 5 CC 9-10 W 7 CC 9-10 W 10 CC11-12SL1d CC11-12SL3 CC11-12SL6</p>	<p>Often the intent of an author of fiction is to expose the truth about human nature.</p> <p>Authors write for a variety of purposes and use multiple techniques to convey their message.</p>	<p>Why read?</p> <p>What is an author's purpose? How can I tell why the author is writing?</p>	<p><i>The Plot Against People</i></p> <ul style="list-style-type: none"> <li>• How would you describe the overall tone of Baker's essay? What aspects of the essay created the tone—elevated diction and syntax, unexpected images, or other factors? Use a chart to provide examples that support your answer.</li> </ul> <p><i>Why Leaves Turn Color in the Fall</i></p> <ul style="list-style-type: none"> <li>• In which parts of her essay is Ackerman's purpose to explain? To describe? To reflect? Are these purposes compatible? Explain.</li> </ul> <p><i>And of Clay We Are Created/Girl, Trapped in Water for 55 Hours, Dies Despite Rescue Attempts</i></p> <ul style="list-style-type: none"> <li>• Do you think Allende values objectivity in reporting? Support your opinion with strong textual evidence.</li> </ul> <p>Writing Workshop: Persuasive Letter Write a persuasive letter in the form of a proposal to an organization or group. You will need to conduct some research to find evidence that supports your proposal. Use a standard business-letter format.</p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
			observation <ul style="list-style-type: none"> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
<b>Unit Six: <i>A Separate Peace</i></b> <b>Timeline: 3-4 weeks</b>			
CC 9-10 RL 1 CC 9-10 RL 2 CC 9-10 RL 3 CC 9-10 RL 4 CC 9-10 RL 5 CC 9-10 RL 6 CC 9-10 RL 10 CC 9-10 W 4 CC 9-10 W 5 CC 9-10 W 7 CC9-10SL1 CC9-10SL1a CC9-10SL1b CC9-10SL1c CC9-10SL1d	<p>Reading is a way to explore personal interests, answer important questions, satisfy one’s need for information, entertain and be entertained, and build understanding of the many dimensions of human experience.</p> <p>Everyone is entitled to his/her opinion about what a text means, but some opinions are more supportable by the text than others.</p> <p>Literature can reflect, clarify, criticize, and satirize the time, ideas, and cultures it depicts.</p> <p>Critical readers question the text, consider various perspectives and look for author’s bias in order to think, live and act differently.</p>	<p>What factors seem to be a threat to friendship?</p> <p>Is war a necessary evil?</p> <p>Is sin inevitable?</p> <p>Is redemption possible?</p>	<p><b>Life at Boarding School.</b>            Have students find out what life is like today on the campus of a prestigious boarding school, such as the Phillips Exeter Academy (the model for Devon School). Ask students to write a comparison between that school and Devon as it is portrayed in <i>A Separate Peace</i>. Students might wish to focus on one of the following topics:</p> <ul style="list-style-type: none"> <li>○ academic curriculum</li> <li>○ clothing styles</li> <li>○ social activities</li> <li>○ the role of sports</li> <li>○ conformity and diversity among students</li> </ul> <p><b>Coming of Age During Wartime.</b>            Discuss with students the fact that, during World War II, relatively few students expressed opposition to the United States's participation in the war. Have them research how students in a later period, such as the Vietnam War or the Gulf War, reacted to those conflicts. Students then present their findings in a research paper.</p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
Differentiation for Advanced learners: Comparison of Looking For Alaska: The New York Times called Looking For Alaska the modern version of A Separate Peace, and Amazon.com recommends each book to customers purchasing the other. Read both novels. Write a comparative essay highlighting the similarities and differences between characters, conflict and theme despite the obvious differences of time and setting.			
<b>Unit Seven: Making a Case: Argument and Persuasion</b> <b>Timeline: 4 weeks</b>			
CC 9-10 RI 2	Authors use a variety of means	How do the beliefs/behaviors of	<i>Doing Nothing is Doing Something</i>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
CC 9-10 RI 4 CC 9-10 RI 5 CC 9-10 RI 6 CC 9-10 RI 8 CC 9-10 RI 9 CC 9-10 W 1 a-e CC 9-10 W 4 CC 9-10 W 5 CC 9-10 W 10 CC9-10SL3 CC9-10SL6	to persuade an audience.  The audience can dictate the appropriate means of persuasion.	others affect your own beliefs/behaviors?  How do the media and other outside influences shape our values and beliefs?  How do we make decisions for ourselves?	<ul style="list-style-type: none"> <li>• What evidence does Quindlen use to support her claim?</li> </ul> <p><i>I Acknowledge Mine</i></p> <ul style="list-style-type: none"> <li>• Does Goodall use emotional appeals appropriately in her argument, or are these appeals rhetorical or logical fallacies—that is, appeals to false situations, appeals to pity, or personal attack? Provide examples to support your opinion.</li> </ul> <p><i>Use of Animals in Biomedical Research</i></p> <ul style="list-style-type: none"> <li>• Supporters of animal rights argue that it is morally wrong for humans to use animals in a way that causes them to suffer or die. Does the AMA offer a satisfactory counter argument to this viewpoint? Cite evidence from the text to support your answer.</li> </ul> <p><i>The Blue Stones</i></p> <ul style="list-style-type: none"> <li>• What are the literal and symbolic meanings of each character or object from the allegory?</li> <li>• The function of allegories is often to teach a lesson or illustrate an important theme to the reader. How does this allegory function thematically?</li> </ul> <p><i>A Chip of Glass Ruby</i></p> <ul style="list-style-type: none"> <li>• What main theme does Gordmier develop in the story to persuade readers? Is she successful? Support your answer.</li> </ul> <p><i>Writing Workshop: Persuasive Essay</i></p> <ul style="list-style-type: none"> <li>• Write a persuasive essay on an issue about which you have a strong opinion. In your essay, try to persuade a specific audience to agree with your position and take a stand or action on it.</li> </ul> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
<b>Unit Eight: <i>Macbeth</i></b> <b>Timeline: 3 weeks</b>			
CC 9-10 RL 1 CC 9-10 RL 3 CC 9-10 RL 4 CC 9-10 RL 7 CC 9-10 RL 9 CC 9-10 RL 10 CC 9-10 W 2 CC 9-10 W 5 CC11-12SL2 CC11-12SL4 CC9-10SL6	<p>Shakespeare's commentary on power, corruption, and blind ambition is still relevant to our own politics today.</p> <p>Things are not always as they appear.</p> <p>People have often relied on superstition and frequently still do today.</p> <p>Our perceptions and interpretations are based on a variety of factors.</p> <p>Literature is a comment on the human condition.</p>	<p>How does power corrupt people?</p> <p>How does blind ambition impact political behavior?</p> <p>How does superstition affect human behavior?</p> <p>How can appearances be different from reality? What influences our perceptions?</p> <p>Why did Shakespeare tell this story, and what factors influenced his writing?</p>	<p><b>To Sleep...</b>            In his essay on <i>Macbeth in Shakespeare</i>, Mark Van Doren says, "For sleep in Shakespeare is ever the privilege of the good and the reward of the innocent." Have students discuss in a research paper whether Shakespeare's use of sleep in <i>Macbeth</i> supports this contention. Ask them if they see any other significance to the way Shakespeare uses sleep in the play. Have them research other Shakespeare plays for examples of sleep imagery to support their position.</p> <p><b>The King is Dead, Long Live the King.</b>            The Gunpowder Plot of 1605 was a plan to assassinate King James I. Have students research it and write a research paper about regicide and its consequences, using the case of Macbeth and Duncan as an example.</p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
Differentiation for Advanced Learners: Students will still read <i>Macbeth</i> , but these are alternative assessments: <b>What Ghost?</b> Have students debate the proposition, "There is no ghost in this play. Macbeth only imagines it." Tell students to take sides on the issue (or argue for deliberate ambiguity) and prepare a 2- or 3- minute opening speech defending their stand. They should also find as much evidence in the play as they can. When they are through, the class could vote on the proposition.  <b>Meet the Press.</b> Have a group of students put on a press conference in which one or several main characters from <i>Macbeth</i> answer questions from the press about Duncan's murder. The "reporters" should write their questions ahead of time, while the Macbeths and the other actors review their characters' traits and alibis. The questions should focus on the action in the play as well as on the character's intentions.			
<b>Unit Nine: The Power of Research</b> <b>Timeline: 3-4 weeks</b>			
CC 9-10 W 2 a-f CC 9-10 W 4 CC 9-10 W 7 CC 9-10 W 8	The amount, and quality, or research depends upon the depth of the research and the quality, or credibility, of your sources.	<p>Why research?</p> <p>Why is it important to use credible sources?</p>	<p>Research Your Future</p> <ul style="list-style-type: none"> <li>• Conduct research on a career or future endeavor of interest to you.</li> <li>• Compose a 7-10 page informative paper (MLA format) that</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
CC 9-10 W 9 CC 9-10 L 1 CC 9-10 L 2 CC 9-10 L 3 CC11-12SL2 CC11-12SL4 CC9-10SL6		What makes a source credible?	<p>details the topic, what is required to have a future in this area, the amount of time it will take and benefits of this career.</p> <ul style="list-style-type: none"> <li>• Also include a brief synopsis of why you chose this topic and feel it is a good fit for you.</li> </ul> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>

## Curriculum Framework for American Literature

School: Newark Charter

Curricular Tool: Holt McDougal American Literature

Grade: 11

Standards Alignment	Unit Concept	Essential Questions	Assessments
<b>Unit One: Early American Writing</b> <b>Timeline: 4 weeks</b>			
CC 11-12 RL 1 CC 11-12 RL 3 CC 11-12 RL 4 CC 11-12 RL 5 CC 11-12 RL 10 CC 11-12 W 7 CC 11-12 W 8 CC 11-12 W 5 CC 11-12 W 9a CC 11-12 W 9b CC11-12SL1 CC11-12SL1a CC11-12SL1b CC11-12SL1c CC11-12SL1d CC11-12SL3	<p>Great literature provides rich and timeless insights into the key themes, dilemmas, and challenges that we face.</p> <p>Good readers use many different strategies to comprehend text.</p> <p>Early American literature is a complex mixture of cultures and eras.</p> <p>Powerful writing with a strong voice has the power to evoke emotion and move people to action.</p>	<p>What do good readers do?</p> <p>What is the author saying? How do I know? What is the gist?</p> <p>How do the early voices of American literature display a tapestry of different voices?</p> <p>What do we learn about a time period through its Literature?</p> <p>How does writing both reflect the society from which it comes and shape the society in which it is written?</p>	<p><b>The Native American Experience</b></p> <ul style="list-style-type: none"> <li>• The World on the Turtle’s Back               <ul style="list-style-type: none"> <li>○ Summarize the differences between the right-handed twin and the left-handed twin. Why do you think the Iroquois honor both twins?</li> </ul> </li> <li>• <i>Coyote and the Buffalo</i> <ul style="list-style-type: none"> <li>○ Critic Paul Rodin has argued that a trickster “is at one and the same time creator and destroyer, giver and negator, he who dupes others and who is always duped himself... He possesses no values, moral or social, is at the mercy of his passions and appetites.” Identify the ways in which Coyote fits this definition. Cite evidence from the text to support your answer.</li> </ul> </li> </ul> <p><b>Early Settlers</b></p> <ul style="list-style-type: none"> <li>• La Relacion               <ul style="list-style-type: none"> <li>○ In what ways would you consider this account a valuable and reliable source of information? What are its shortcomings? Explain your conclusions.</li> </ul> </li> <li>• Of Plymouth Plantation               <ul style="list-style-type: none"> <li>○ A Chronicle is an objective, chronological account of historical events. How might Bradford’s narrative changed had he written a personal account of his experience?</li> </ul> </li> </ul> <p><b>The Puritan Tradition</b></p> <ul style="list-style-type: none"> <li>• To My Dear and Loving Husband...</li> <li>• Huswifery</li> <li>• The Demons of Salem, With Us Still               <ul style="list-style-type: none"> <li>○ Use details from the three poems to draw conclusions about how the authors, and Puritan society, feel about marriage, religious beliefs, and daily life. Cite evidence from the text to support your response.</li> </ul> </li> </ul>

Standards Alignment	Unit Concept	Essential Questions	Assessments
			<p><b>Writers of the Revolution</b></p> <ul style="list-style-type: none"> <li>• Speech in the Virginia Convention <ul style="list-style-type: none"> <li>○ How does Henry convince his audience that the moment to fight is at hand? Does he appeal mainly to logic or emotion? Explain.</li> </ul> </li> <li>• The Declaration of Independence <ul style="list-style-type: none"> <li>○ How effective is the four part writing structure in stating the colonists' case?</li> </ul> </li> </ul> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>

**Unit Two: Between a Rock and a Hard Place (DDOE Unit)**

**Timeline: 3 weeks**

<p>CC 11-12 RL 1  CC 11-12 RL 2  CC 11-12 RL 3  CC 11-12 RL 4  CC 11-12 RL 5  CC 11-12 RL 8  CC 11-12 RL 9  CC 11-12 RL 10  CC 11-12 W 9a  CC 11-12 W 9b  CC 11-12 W 3a  CC11-12SL1  CC11-12SL1a  CC11-12SL1b  CC11-12SL2  CC11-12SL3</p>	<p>Truth is not determined by the number of people who believe it</p> <p>Perception and belief are often assumed to be true, yet truth stands apart from human fallibility.</p> <p>Law and justice are often equated, yet laws are determined by men, while justice is often beyond the scope of law. Law is man's imperfect attempt to interpret and insure justice.</p> <p>Along with responsibility come risk and sacrifice.</p> <p>Historical and cultural context of an author's work influences the author's</p>	<p>What is evil? What forms does it take?</p> <p>When do ambition and the need to protect one's own become destructive?</p> <p>What responsibility does an individual have in combating injustice?</p> <p>What is the difference between law and justice?</p> <p>What is more important, one's life or one's principles, and why?</p> <p>To what extent do we influence each other's behavior and thoughts?</p> <p>What is the cost/risk of</p>	<p><i>A Legacy</i></p> <p>Imagine that you are either John Proctor or Rev. John Hale and that you want to leave behind a written document defending your choices and actions as related in <i>The Crucible</i>, by Arthur Miller. Your hope is to leave a legacy for generations to come justifying your actions in the play in the form of a letter, sermon, speech, essay, etc. Your final document should reflect your beliefs (as Proctor or Hale), which guided your actions.</p> <p>You have been invited to present as a panelist in a symposium. This symposium will explore situations from recent world history in which issues of "prejudice over reason and fear over courage" may have dictated people's actions/reactions. As one of the panelists, you should select an event and research it, examining the parallels to the Salem Witch Hunt of 1692 that Miller uses as the basis of <i>The Crucible</i>. Consider what you have discovered about evil, ambition, law, and justice to suggest what we could learn that might prevent or minimize the likelihood of such a reoccurrence. Present the results of your research with an accompanying abstract to give to symposium participants.</p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
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Standards Alignment	Unit Concept	Essential Questions	Assessments
	<p>viewpoint and theme.</p> <p>In an individual's quest to take a stand or be a pioneer, he/she may be met with obstacles out of his/her control, and may not always reach the goals he or she sets for him/herself.</p> <p>Stepping out into any frontier brings potential risks and sacrifices. Good readers make personal connects to the text.</p> <p>Time and place influences text.</p> <p>An effective summary can synthesize ideas from various sources.</p> <p>Writers often use other authors' ideas to stimulate their own thoughts and incorporate these ideas in their writings, avoiding plagiarism.</p> <p>Speakers orally communicate information, opinions, and ideas effectively to different audiences for a variety of purposes.</p>	<p>tolerating (understanding) and accepting each other's differences?</p> <p>How am I like some or one of the characters in this text?</p> <p>How does the historical and cultural context of this text find its way into the author's message?</p> <p>What do I think about the characters' choices and why?</p> <p>How do the issues and themes presented in the play compare and contrast with those presented in the films?</p> <p>How can I capture the main points of this text?</p> <p>How can I use other authors' ideas to stimulate my own thinking and writing?</p> <p>How can I use other authors' ideas in my own writing without plagiarizing?</p> <p>How can I plan and organize my speaking to best convince my audience?</p>	

Standards Alignment	Unit Concept	Essential Questions	Assessments
<b>Unit Three: Romanticism</b> <b>Timeline: 4 weeks</b>			
CC 11-12 RL 1 CC 11-12 RL 2 CC 11-12 RL 3 CC 11-12 RL 4 CC 11-12 RL 5 CC 11-12 RL 6 CC 11-12 RL 10 CC 11-12 W 4 CC 11-12 W 5 CC 11-12 W 3a – e CC11-12SL3 CC11-12SL4 CC11-12SL6	<p>Authors use their craft of writing to challenge current</p> <p>Writers use their craft with language to comment on the current society.</p> <p>Writing allows authors to become a narrator or speaker who is not themselves and explore the dark side of human existence: disease, madness, death, destruction, and the supernatural.</p> <p>Good readers use many different strategies to comprehend text and capture their thinking. When one strategy doesn't work, they switch to a new strategy.</p>	<p>How is literature a product of the time period in which it was written?</p> <p>What are the characteristics of Romanticism? How is Romanticism reflected in the literature of this period?</p> <p>In what ways does the Romantic period seem better than the contemporary American period? In what ways does it seem worse?</p>	<p><b>The Early Romantics</b></p> <ul style="list-style-type: none"> <li>• The Devil and Tom Walker             <ul style="list-style-type: none"> <li>○ Irving was a master of satire and eliciting mood and alluding to imagery in his works. Identify indicators of his use of subtle satire. Analyze the subjects of Irving's satirical innuendos. Are there commonalities among the subjects?</li> <li>○ Irving's use of imagery to depict the nuances of his characters is peppered throughout his works. Create a chart in which you identify the images he elicits, the characters or characterization he is depicting, and the mood those images elicit. How does his use of imagery contribute to the overall tone of this story?</li> </ul> </li> <li>• Thanatopsis             <ul style="list-style-type: none"> <li>○ The title of the poem comes from the Greek words meaning vision and death. Explain the vision of death in the poem that might explain the author's title choice.</li> </ul> </li> </ul> <p><b>The Fireside Poets</b></p> <ul style="list-style-type: none"> <li>• A Psalm of Life</li> <li>• The Tide Rises, The Tide Falls             <ul style="list-style-type: none"> <li>○ Compare and contrast Longfellow's outlook on life and death in each poem. Do the two poems express similar or different views? Create a Venn Diagram to organize thoughts.</li> <li>○ How do the two descriptions of "footprints" evoke mood? What mood do they create?</li> </ul> </li> <li>• The Chambered Nautilus</li> <li>• Old Ironsides             <ul style="list-style-type: none"> <li>○ Change is unavoidable, Which change would Holmes view as change as natural and desirable or unnatural and undesirable? Use evidence from the poems to identify support for assertions.</li> </ul> </li> </ul> <p><b>The Transcendentalists</b></p> <ul style="list-style-type: none"> <li>• Self-Reliance</li> <li>• Nature             <ul style="list-style-type: none"> <li>○ Have students identify their definition of "self-reliance" prior to reading. After reading Emerson's Transcendentalist views, how does</li> </ul> </li> </ul>

Standards Alignment	Unit Concept	Essential Questions	Assessments
			<p>that definition of “self-reliance” change? What elements or specific evidence from the text supports the old or new definition of the word?</p> <ul style="list-style-type: none"> <li>○ Have students identify elements of Transcendental thought from the two selections. Ask them to cite the specific line(s) from the two selections and identify what idea of transcendentalism it epitomizes.</li> </ul> <ul style="list-style-type: none"> <li>• Civil Disobedience</li> <li>• On Civil Disobedience <ul style="list-style-type: none"> <li>○ Henry David Thoreau exemplified the works of Emerson’s “Self-Reliance.” Mathama Gandhi greatly admired Thoreau’s essay on Civil Disobedience and put some of his ideas into practice in his own life and beliefs in how to stand in the face of injustice. What is significant about the effect that each writer/figure had on the next? What does this extended view of transcendentalism say about the beliefs within the Transcendentalist motto of “trust[ing] thyself?”</li> </ul> </li> </ul> <p><b>American Gothic</b></p> <ul style="list-style-type: none"> <li>• The Fall of the House of Usher</li> <li>• The Masque of the Red Death <ul style="list-style-type: none"> <li>○ Poe uses minute, scrutinizing detail to paint the pictures, mental images, and evoke mood within the reader. How does his use of elaborate detail clarify or muddy the concept of loss and dealing with loss within each selection? Does Poe provide just enough detail or too much? Write an essay in which that presents a view stating that Poe uses just enough imagery, or too much in keeping true to his selections’ themes. Provide specific evidence from each text to support your responses.</li> </ul> </li> </ul> <p><b>Writing Workshop</b></p> <ul style="list-style-type: none"> <li>• Write a personal narrative or declaration that includes ach of the following Traits of Writing: <ul style="list-style-type: none"> <li>○ Development</li> <li>○ Style/voice</li> <li>○ Mode of Development:</li> <li>○ Narration</li> <li>○ Description</li> <li>○ Dialogue</li> <li>○ Grammar taught in the context of student writing</li> </ul> </li> </ul> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> </ul>

Standards Alignment	Unit Concept	Essential Questions	Assessments
			<ul style="list-style-type: none"> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
<b>Unit Four: The Move to Realism/ The Civil War Era</b> <b>Timeline: 4 weeks</b>			
CC 11-12 RL 1 CC 11-12 RL 3 CC 11-12 RL 4 CC 11-12 RI 2 CC 11-12 RI 3 CC 11-12 RI 4 CC 11-12 RI 5 CC 11-12 RI 6 CC 11-12 RI 7 CC 11-12 W 1 CC 11-12 W 3a-e CC11-12SL3 CC11-12SL4 CC11-12SL6	<p>Just because you had a strong reaction to a text doesn't mean you understood the text.</p> <p>Different readers may respond to the same text in different ways. The better responses are those that provide greater insight into the text and/or the issues raised.</p> <p>During the Civil War, Americans created a literary record that ranged from vivid accounts of wartime life to profound expressions of faith in American ideals.</p> <p>The literature produced by and about the civil rights struggle of African Americans challenges American ideals of liberty, prosperity, and independence.</p>	<p>What makes a text great? What is the relationship between popularity and greatness in texts?</p> <p>How does the distance and reflection of time impact our perception of greatness?</p> <p>From whose viewpoint are we reading?</p> <p>How is the Civil War and its surrounding issues reflected in the writing of the time period?</p> <p>What made the poetry of Whitman and Dickinson revolutionary?</p>	<p><b>Form and Content in Poetry</b></p> <ul style="list-style-type: none"> <li>• I Hear America Singing</li> <li>• Song of Myself</li> <li>• Beat! Beat! Drums!             <ul style="list-style-type: none"> <li>○ How do the words in lines 40-43 of "Song of Myself" connect to the subjects of Whitman's singing in the poem "I Hear America Singing?"</li> <li>○ Although Whitman was considered a great master of free verse, he incorporated devices into his poetry to achieve a natural rhythm and musical effects. Identify specific examples from each poem of cataloging, repetition and parallelism. How does the use of these devices contribute to the flow of each poem?</li> </ul> </li> <li>• Success is counted sweetest</li> <li>• Much Madness is divinest Sense</li> <li>• I heard a Fly buzz – when I died             <ul style="list-style-type: none"> <li>○ Analyze Dickinson's use of punctuation, the short stops, emphasis on seemingly insignificant words with a capital letter: why does she choose to interrupt the flow of her poems with such stark stops and starts and awkward emphases?</li> <li>○ Students choose a subject to write a poem about in the style of Dickinson.</li> </ul> </li> </ul> <p><b>Literature of the Civil War</b></p> <ul style="list-style-type: none"> <li>• The Gettysburg Address</li> <li>• The Emancipation Proclamation             <ul style="list-style-type: none"> <li>○ Although the Emancipation Proclamation was more of a symbolic gesture as opposed to an enforceable law, it inspired Northerners opposed to slavery and African Americans alike, strengthening the Civil War efforts. How was the Emancipation Proclamation a homage to the soldiers who were subject of The Gettysburg Address?</li> </ul> </li> <li>• Incidents in the life of a Slave Girl</li> <li>• An Occurrence at Owl Creek Bridge             <ul style="list-style-type: none"> <li>○ Interpret the idea of "freedom" and escape from each of the selections. From what would each be free? Both literally and figuratively, how would being set "free" save each of the characters in these selections?</li> </ul> </li> </ul>

Standards Alignment	Unit Concept	Essential Questions	Assessments
			<ul style="list-style-type: none"> <li>○ Additional Assessment:               <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul> </li> </ul>
<b>Unit Five: Regionalism and Naturalism</b> <b>Timeline: 4 weeks</b>			
CC 11-12 RL 2 CC 11-12 RL 3 CC 11-12 RL 4 CC 11-12 RL 5 CC 11-12 RL 6 CC 11-12 RL 7 CC 11-12 W 1 CC 11-12 W 4 CC 11-12 W 5 CC 11-12 W 7 CC 11-12 W 10 CC11-12SL4 CC11-12SL6	<p>The impact of a text on a reader is influenced by the reader’s experience.</p> <p>In the past cultural differences among people from various parts of the United states were more marked; writers celebrated this diversity.</p> <p>Shifts in and author’s perspective often swing on a pendulum often reacting to what came before.</p>	<p>What are the basic characteristics of Realism, Regionalism, and Naturalism? How are they reflected in the literature of the time period?</p> <p>How do you think the historical and cultural trends of this period continue to affect the United States today?</p>	<p><b>Regionalism</b></p> <ul style="list-style-type: none"> <li>• The autobiography of Mark Twain               <ul style="list-style-type: none"> <li>○ Write a narrative essay in which you illustrate the relationship between young Twain and the mesmerizer. How are both engaged in the act of deceit? How is one taking advantage of the other?</li> </ul> </li> <li>• Epigrams               <ul style="list-style-type: none"> <li>○ Students restate Twain’s epigrams into the their own words.</li> <li>○ Students create their own epigrams based on modern ideals and issues.</li> </ul> </li> <li>• From Life on the Mississippi               <ul style="list-style-type: none"> <li>○ Identify the point at which young Twain suddenly “grows up.” What at this point in the story does this maturation occur? How genuine is the maturation? Use evidence from the selection to support responses.</li> </ul> </li> <li>• The Outcasts of Poker Flat               <ul style="list-style-type: none"> <li>○ Through the use of description and character development, Harte creates interesting and complex characters who possess both positive and negative traits. Write about how the characterization makes the characters in “The Outcasts of Poker Flat” more genuine. How does this allow the reader to connect with the text? Does this use of characterization contribute to whether or not a person enjoys the story?</li> </ul> </li> </ul> <p><b>The Rise of Naturalism</b></p> <ul style="list-style-type: none"> <li>• The Open Boat               <ul style="list-style-type: none"> <li>○ Stephen Crane was a naturalist writer. What are the elements of Naturalism that contribute to the overall development of the story “The Open Boat?” Identify the literary elements and provide evidence from the story in which the elements are clearly illustrated. Create a three column chart with column headings; Literary Element, Specific evidence from text, and the overall effect the elements have on the</li> </ul> </li> </ul>

Standards Alignment	Unit Concept	Essential Questions	Assessments
			<p>story to the reader.</p> <ul style="list-style-type: none"> <li>• The Commodore Sinks at Sea <ul style="list-style-type: none"> <li>○ How is studying primary source documents different from other sources of information? How reliable are primary source documents in the telling of history? Identify the benefits of primary source documents. What primary source documents are the most famous in our American History?</li> </ul> </li> <li>• The Law of Life <ul style="list-style-type: none"> <li>○ Identify the power of the point of view changes within the story. How does the mood of the story change when the point of view changes? Students identify the need for the point of view change and the power this change had on the story, or assert that the point of view should have remained the same (they choose which p.o.v) throughout the story. Have students write a brief essay, citing evidence from the text, that contributes to their assertions regarding the story p.o.v.</li> <li>○ Students do a comparison on the ideas of death in the story and their own beliefs. Identify scenes within the story that elicited shock from the reader. How did London accomplish this?</li> </ul> </li> </ul> <p><b>A New Role for Women</b></p> <ul style="list-style-type: none"> <li>• The Story of an Hour</li> <li>• The Yellow Wallpaper</li> <li>• Ethan Frome</li> </ul> <p>Writing Workshop: Literary Analysis Choose a story that you have read that you can't stop thinking about. Write an essay that briefly summarizes the story and examines its meaning. Focus on specific elements that makes the story meaningful and memorable.</p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
<p><b>Unit Six: The Harlem Renaissance and the Modern Age</b> <b>Timeline: 4 weeks</b></p>			
<p>CC 11-12 RL 1 CC 11-12 RL 2 CC 11-12 RL 3</p>	<p>Modern American literature developed during a turbulent time and is</p>	<p>How was Modernism a departure from the American literary history?</p>	<p><b>The Harlem Renaissance</b></p> <ul style="list-style-type: none"> <li>• Harlem</li> <li>• The Negro Speaks of Rivers</li> </ul>

Standards Alignment	Unit Concept	Essential Questions	Assessments
CC 11-12 RL 4 CC 11-12 RL 5 CC 11-12 RL 6 CC 11-12 RL 10 CC 11-12 W 4 CC 11-12 W 5 CC 11-12 W 7 CC11-12SL1 CC11-12SL1a CC11-12SL1c CC11-12SL3	<p>characterized by extremes, rapid change, and clashing values.</p> <p>Literature presents complex stories in which the inner and outer lives of human beings are revealed.</p> <p>Reading for meaning often requires imagining conversation with and questioning of the author. You must consider the author’s perspective and respond.</p>	<p>How is Modernism reflected in the literature of the time period?</p> <p>What social and cultural forces shaped the Harlem Renaissance?</p>	<ul style="list-style-type: none"> <li>• The Weary Blues</li> <li>• If We Must Die</li> <li>• A Black Man Talks of Reaping</li> <li>• How it Feels to Be Colored Me               <ul style="list-style-type: none"> <li>○ Students write an reflection piece on how they feel these poems are reflective of a generation of African Americans trying to proclaim their identity. What specific evidence can be taken from each poem to illustrate this identity?</li> </ul> </li> </ul> <p><b>The New Poetry</b></p> <ul style="list-style-type: none"> <li>• Chicago</li> <li>• Grass               <ul style="list-style-type: none"> <li>○ Compare and contrast the tone and diction between the poems, “Chicago” and “Grass.” How does tone and diction create feeling and mood within a reader?</li> </ul> </li> <li>• Acquainted with the Night</li> <li>• Nothing Gold Can Stay</li> <li>• “Out, Out—“               <ul style="list-style-type: none"> <li>○ Identify the ambiguity within Frost’s three poems. Have students free write about why Frost would have chosen to use ambiguity within these poems as a literary device. How does it assist in the poem’s message? Have students site specific lines from each of the three poems where Frost uses ambiguity.</li> </ul> </li> </ul> <p><b>The Modern Short Story</b></p> <ul style="list-style-type: none"> <li>• Winter Dreams</li> <li>• In Another Country               <ul style="list-style-type: none"> <li>○ Journaling and reflections through each story. How does each story speak to modern America? How did the subject matters reflect the time period in which they were written? Are there specific lines or images within each story that elicit specific mood? How do these two stories speak of loss? Both physical and emotional, spiritual?</li> </ul> </li> <li>• The Jilting of Granny Weatherall</li> <li>• A Rose for Emily</li> <li>• The Life You Save May Be Your Own               <ul style="list-style-type: none"> <li>○ Journaling about the main ideas and themes within each story. Are there any common themes? How specifically, do these three stories have commonalities? Identify the stories depiction of human nature. How does this depiction support or deny the claims made by the transcendental writers?</li> </ul> </li> </ul>

Standards Alignment	Unit Concept	Essential Questions	Assessments
			Additional Assessment: <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
<b>Unit Seven: Making a Case: From Depression to Contemporary Literature</b> <b>Timeline: 6 weeks</b>			
CC 11-12 RI 2 CC 11-12 RI 4 CC 11-12 RI 5 CC 11-12 RI 6 CC 11-12 RL 1 CC 11-12 RL 2 CC 11-12 RL 3 CC 11-12 RL 4 CC 11-12 RL 5 CC 11-12 W 1 a-e CC 11-12 W 4 CC 11-12 W 5 CC 11-12 W 10 CC11-12SL1 CC11-12SL1a CC11-12SL1c CC11-12SL3 CC11-12SL6	<p>Authors place their characters in believable situations, where they face difficult decisions.</p> <p>The solution to a problem often reflects the values of the era.</p> <p>Reading helps us form our opinions.</p> <p>Great literature provides rich and timeless insights into the key themes, dilemmas, and challenges that we face.</p> <p>Literature presents complex stories in which the inner and outer lives of human beings are revealed.</p> <p>When injustice is part of the basic fabric of a society, it may take a social revolution to change things.</p> <p>The Hip Hop cultural movement of the late 21<sup>st</sup> century has both reflected</p>	<p>How does an author make characters seem real?</p> <p>Can a wrong action ever be right?</p> <p>What responsibility do we have for each other's welfare?</p> <p>How is the literature of the 21<sup>st</sup> century remaking past literary traditions?</p> <p>What is post-modernism and how is it reflected in the literature of the late 21<sup>st</sup> century?</p> <p>How is America's constant struggle with nature and technology manifest in the literature of this time period?</p> <p>How do texts help shape our decisions?</p> <p>What's old and what's new here? Have we examined this idea before? Does it matter?</p>	<p><b>Modern American Drama</b></p> <ul style="list-style-type: none"> <li>• Our Town</li> <li>• The Glass Menagerie             <ul style="list-style-type: none"> <li>○ Compare and contrast the characters from the excerpts. What characters have commonalities and/or differences?</li> </ul> </li> </ul> <p><b>Responses to War</b></p> <ul style="list-style-type: none"> <li>• Why Soldiers Won't Talk             <ul style="list-style-type: none"> <li>○ Steinbeck asserts that the reason soldiers don't talk about war is because they can't remember. Have students write a journal reflection piece on whether or not they agree with this assertion. What other reason could be given for returning soldiers' silence?</li> </ul> </li> <li>• Adam             <ul style="list-style-type: none"> <li>○ Historical content oftentimes plays an important role in literature. Have students identify lines in which the historical content of "Adam" is evident. Students write the line, what it means, and what historical event or perspective from which the line should be read. How does diving into the history of a short story alter the connection to the reader?</li> </ul> </li> </ul> <p><b>Civil Rights Literature</b></p> <ul style="list-style-type: none"> <li>• Letter from Birmingham Jail</li> <li>• Ballad of Birmingham</li> <li>• Stride Toward Freedom</li> <li>• Coming of Age in Mississippi             <ul style="list-style-type: none"> <li>○ Students make comparisons between the Civil Rights Movement and the views of transcendentalists.</li> <li>○ Identify common themes among the texts.</li> <li>○ Dialogue Journal-students reflect before, during and after they read, then partner share their journals to have conversations about the commonalities, differences, and feelings the other had regarding the text.</li> </ul> </li> </ul>

Standards Alignment	Unit Concept	Essential Questions	Assessments
	culture and contributed to culture's creation.		<p><b>American Voices</b></p> <ul style="list-style-type: none"> <li>• Mother Tongue</li> <li>• Straw into Gold</li> <li>• Life for My Child is Simple <ul style="list-style-type: none"> <li>○ Identify how the literary element of voice is utilized in the three works. How does “voice” have more than one meaning in each of these selections? Identify evidence for each definition of voice.</li> </ul> </li> </ul> <p><b>Writing Workshop: Problem-Solution Essay</b></p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
<p><b>Unit Eight: Dreams Deferred</b>  <b>Timeline: 3 weeks</b></p>			
<p>CC 11-12 RL 1  CC 11-12 RL 3  CC 11-12 RL 4  CC 11-12 RL 7  CC 11-12 RL 9  CC 11-12 RL 10  CC 11-12 W 2  CC 11-12 W 5  CC 11-12 W 7  CC 11-12 W 8  CC 11-12 W 9  CC11-12SL1  CC11-12SL1a  CC11-12SL1b  CC11-12SL1c  CC11-12SL1d  CC11-12SL2  CC11-12SL6</p>	<p>Great literature provides rich and timeless insights into the key themes, dilemmas, and challenges that we face.</p> <p>Literature presents complex stories in which the inner and outer lives of human beings are revealed.</p> <p>When injustice is part of the basic fabric of a society, it may take a social revolution to change things.</p>	<p>Can a wrong action ever be right?</p> <p>What responsibility do we have for each other's welfare?</p> <p>How is the literature of the 21<sup>st</sup> century remaking past literary traditions?</p>	<p><b>The Civil Rights Movement.</b>  The Civil Rights Movement forms an important background to the story of the Younger family, who are searching for an identity and dealing with prejudice. Have students research the Civil Rights Movement in the United States in the 1950s and the 1960s and write a research paper about one aspect of it--either about a major event, like the Montgomery bus boycott, or about a person like Dr. Martin Luther King, Jr.</p> <p><b>African-American Writers.</b>  Have student research another African-American woman writer, such as Zora Neale Hurston, Toni Morrison, or Alice Walker. Instruct students to write a comparison between the life and work of Lorraine Hansberry and that writer. Have them note similarities and differences in their work and how it reflects their feelings about such issues as civil rights and the African-American family.</p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>

Standards Alignment	Unit Concept	Essential Questions	Assessments
<b>Unit Nine: The Power of Research</b> <b>Timeline: 3-4 weeks</b>			
CC 11-12 W 2 a-f CC 11-12 W 4 CC 11-12 W 7 CC 11-12 W 8 CC 11-12 W 9 CC 11-12 L 1 CC 11-12 L 2 CC 11-12 L 3 CC11-12SL2 CC11-12SL4 CC11-12SL5	The amount, and quality, or research depends upon the depth of the research and the quality, or credibility, of your sources.	Why research?  Why is it important to use credible sources?  What makes a source credible?	Research Your Future <ul style="list-style-type: none"> <li>• Conduct research on a career or future endeavor of interest to you.</li> <li>• Compose a 7-10 page informative paper (MLA format) that details the topic, what is required to have a future in this area, the amount of time it will take and benefits of this career.</li> <li>• Also include a brief synopsis of why you chose this topic and feel it is a good fit for you.</li> </ul> Additional Assessment: <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>

## Curriculum Framework for Advanced Placement English Language Composition

School: Newark Charter School      Curricular Tool: Readers for Writers – McCuen-Metherell & Winkler      Grade: 11

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<b>Unit One: Reading and Writing; From Reader to Writer</b> <b>Timeline: 6 weeks</b>			
CC11-12 SL 1a CC11-12 SL 1b CC11-12 SL 1c CC11-12 SL 1d CC11-12 SL 2 CC11-12 SL 3 CC11-12 SL 4 CC11-12 SL 5 CC11-12 SL 6 CC11-12 W 2a CC11-12 W 2b CC11-12 W 2c CC11-12 W 2d CC11-12 W 2e CC11-12 W 2f CC11-12 W 4 CC11-12 RL 1 CC11-12 RL 2 CC11-12 RL 3 CC11-12 RL 4 CC11-12 RL 9 CC11-12 RI 1 CC11-12 RI 2 CC11-12 RI 4 CC11-12 RI 7 CC11-12 RI 9 CC11-12L1a CC11-12L1b CC11-12L2a CC11-12L2b CC11-12L3 CC11-12L4 CC11-12L5a	Good writers are good readers.  Good writers use effective strategies to convey a variety of information.  Good writers use grammar and rhetoric effectively.	What is the purpose for writing?  What is voice?  In what ways can a writer develop voice to convey meaning?  What is the purpose of organizing writing?  What is rhetoric?  Why is grammar significant?	<p><b>Using Rhetoric and Grammar</b></p> <ul style="list-style-type: none"> <li>• Students will analyze the following writings for effective use of rhetoric and grammar:               <ul style="list-style-type: none"> <li>○ <i>I Have a Dream</i></li> <li>○ <i>Letter to Horace Greeley</i></li> <li>○ <i>Have a Cigar</i></li> <li>○ <i>The Declaration of Independence</i></li> <li>○ <i>the Preamble to the Constitution</i></li> <li>○ <i>Bill of Rights</i></li> <li>○ <i>Lincoln's Second Inaugural Address</i></li> </ul> </li> </ul> <p><b>Using Voice</b></p> <ul style="list-style-type: none"> <li>• Students will analyze the following writings for effective use of voice:               <ul style="list-style-type: none"> <li>○ <i>The Waltz</i></li> <li>○ <i>Salvation</i></li> <li>○ <i>A Grunt's Prayer</i></li> </ul> </li> </ul> <p><b>What Is a Thesis?</b></p> <ul style="list-style-type: none"> <li>• Students will analyze the following writings for effective use of writing a thesis               <ul style="list-style-type: none"> <li>○ <i>The Grieving Never Ends</i></li> <li>○ <i>A Good Man is Hard to Find</i></li> <li>○ <i>Spring</i></li> </ul> </li> </ul> <p><b>Writing Project One:</b>            Select any two paragraphs, one from an article in <i>Reader's Digest</i> another from an article in <i>The New Yorker</i>. Analyze the differences in the language (diction, phrasing, sentences style etc) and speculate on the intended audience of each magazine.</p> <p><b>Writing Project Two:</b>            To an audience of African American readers, write an essay arguing for or against the idea that race relations in America have gotten better since Dr. King</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
CC11-12L5b			<p>gave his “I Have a Dream” speech.</p> <p><b>Writing Project Three:</b>            Divide a group of students into two teams. Have each team poll its members for the writing techniques they have successfully used over the years to write essays. Create lists after appropriate discussion and explanation of each technique. Have the groups compare lists. Finally have each group compose and present their findings highlighting what the team has found similar and dissimilar among its members.            Once groups have identified what techniques they have in common, put students in teams and charge them with creating an essay on a current events issue of their choice, making sure that although seamless, each team member’s “voice” is heard in the essay.</p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
<p><b>Unit Two: Earth and the Environment and other Contemporary Issues</b>  <b>Timeline: 5 weeks</b></p>			
CC11-12RL1 CC11-12RL2 CC11-12RL4 CC11-12RL6 CC11-12RI1 CC11-12RI2 CC11-12RI3 CC11-12RI4 CC11-12RI5 CC11-12RI6 CC11-12W1a CC11-12W1b CC11-12W1c CC11-12W1d CC11-12W1e CC11-12W4 CC11-12W5 CC11-12W6	<p>The art of rhetoric leads to producing texts designed to be meaningful, purposeful, or effective for an audience.</p> <p>The study of rhetoric involves analyzing how writers produce such meaningful, purposeful, and effective texts for an audience.</p> <p>Authors combine facts and opinions to communicate perspectives and information.</p>	<p>What is the difference and relationship between fact and opinion in writing?</p> <p>What voices are speaking out about the earth and the environment? What other current events issues are at the forefront of debatable issues? Who is most accurate, credible, and reliable? How do we know?</p> <p>How do texts shape our decisions? How do the media and special interest groups use rhetoric and persuasive techniques to change people’s</p>	<p><b>Literature for Analysis:</b></p> <ul style="list-style-type: none"> <li>○ Analyzing writers’ biases and how that impacts the message and the reader</li> <li>○ Analysis of rhetorical elements using syntax, organization, literary devices, levels of discourse, imagery, diction, detail, dialogue</li> <li>○ Continued evaluation of argumentation and persuasion through evaluation of argumentation and persuasion through analyzing the sender/receiver relationship, message, evidence, logic, language</li> <li>○ Analyzing point of view: speaker, occasion, audience, purpose, subject, tone</li> <li>○ Analyzing tone: diction, imagery, theme, style</li> <li>○ Rhetorical analysis and annotating text: diction, unity, coherence, audience, tone, syntax</li> <li>○ Analysis of process analysis and division and classification</li> <li>○ Short Works: poetry, short stories, essays, nonfiction</li> <li>○ Al Gore – <i>An Inconvenient Truth</i></li> </ul> <p><b>Writing and Composition:</b></p> <ul style="list-style-type: none"> <li>○ Understanding how fact and opinion work together in writing</li> <li>○ Practicing writing from various points of view to explore bias in writing</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
CC11-12W7 CC11-12W8 CC11-12SL1a CC11-12SL1c CC11-12SL1d CC11-12SL2 CC11-12SL3 CC11-12SL6 CC11-12L1a CC11-12L1b CC11-12L2b CC11-12L3a	Writers arrange their text through structure and organization with the reader in mind to produce a given effect.	behaviors towards current events issues?	<ul style="list-style-type: none"> <li>○ Informal writing assignments to assist students in comprehending texts, and analyzing rhetoric</li> <li>○ Writing analysis paragraphs: title/topic of section, attitude (+ because...), device/characteristic, explanation of device, quote/examples, interpretation/analysis, tie it back to attitude</li> <li>○ For writing introductions – title and author, topic of prompt, attitude/tone, [audience, point of view, purpose, and structure – when appropriate].</li> <li>○ For writing conclusions – author’s lesson, reader’s learning – specific and global, character’s learning (if appropriate), connections, biases revealed, ending of the work</li> <li>○ Practice exercises in process analysis and division and classification</li> <li>○ Time writings and common assessments</li> </ul> <p><b>Writing Project One:</b> Write an analysis of how process analysis or division and classification helps the reader make sense of information. Choose and read specific texts from which to reference specific examples.</p> <p><b>Research Project:</b></p> <ul style="list-style-type: none"> <li>○ Working with drafts</li> <li>○ Revising and editing writing</li> <li>○ Working with peer groups and providing quality responses</li> <li>○ Using peer response to improve writing</li> <li>○ Self-assessment and reflection</li> <li>○ Formatting/publishing final written project</li> <li>○ Sharing work with classmates</li> </ul>
<b>Unit Three: Patterns of Development</b> <b>Timeline: 8 weeks</b>			
CC11-12 RL 1 CC11-12 RL 3 CC11-12 RL 4 CC11-12 RL 5 CC11-12 RL 6 CC11-12 RL 7 CC11-12 RL 10 CC11-12 RI 3 CC11-12 RI 4 CC11-12 RI 5	Good writers use illustration and description to clarify details.  Good writers tell a story.	What does narration do?  When should a writer use description?  What is the purpose of writing illustration?  When is it appropriate to compare and contrast writings?	<p><b><u>What Is Narration?</u></b></p> <ul style="list-style-type: none"> <li>• Students will analyze the following writings for effective use of narration:               <ul style="list-style-type: none"> <li>○ <i>Shooting an Elephant</i></li> <li>○ <i>My Name is Margaret</i></li> <li>○ <i>Shame</i></li> <li>○ <i>Those Winter Sundays</i></li> </ul> </li> </ul> <p><b><u>What Is Description?</u></b></p> <ul style="list-style-type: none"> <li>• Students will analyze the following writings for effective use of</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
CC11-12 RI 6 CC11-12RI7 CC11-12 RI 8 CC11-12 W 3a CC11-12 W 3b CC11-12 W 3c CC11-12 W 3d CC11-12 W 3e CC11-12 W 4 CC11-12 W 5 CC11-12 SL 1a CC11-12 SL 1b CC11-12 SL 1c CC11-12 SL 1d CC11-12L5a CC11-12L5b CC11-12L6			<p>description</p> <ul style="list-style-type: none"> <li>○ <i>Body Image</i></li> <li>○ <i>Stretch Marks</i></li> <li>○ <i>Hell</i></li> <li>○ <i>A Worn Path</i></li> </ul> <p><b><u>What Is Exemplification?</u></b></p> <ul style="list-style-type: none"> <li>• Students will analyze the following writings for effective use of illustration/exemplification:             <ul style="list-style-type: none"> <li>○ <i>What is Style?</i></li> <li>○ <i>In the Name of the Law...</i></li> <li>○ <i>“Mirror, Mirror on the wall...”</i></li> </ul> </li> </ul> <p><b><u>What is Comparison/Contrast?</u></b></p> <ul style="list-style-type: none"> <li>• Students will compare/contrast the following writings:             <ul style="list-style-type: none"> <li>○ <i>The Lean and Hungry look</i></li> <li>○ <i>Grant and Lee: A Study in Contrasts</i></li> <li>○ <i>Baba and Me</i></li> </ul> </li> </ul> <p><b><u>What is Argumentation and Persuasion?</u></b></p> <ul style="list-style-type: none"> <li>• Students will analyze the following writings:             <ul style="list-style-type: none"> <li>○ <i>Why Don't We Complain</i></li> <li>○ <i>A Modest Proposal</i></li> <li>○ <i>Sex Predators Can't Be Saved</i></li> <li>○ <i>Homeless: Expose the Myths</i></li> </ul> </li> </ul> <p><b>Writing Project One:</b> Addressing yourself to a group of eighth graders, write an essay about avoiding drugs using examples from your own experiences or those of acquaintances and friends. Remember to be VIVID.</p> <p><b>Writing Project Two:</b> Write an essay in which you narrate an incident that proves one of the following:</p> <ul style="list-style-type: none"> <li>• People are often bigoted</li> <li>• Having good neighbors is important</li> <li>• Pets are often astoundingly loyal</li> <li>• Difficulties can be stepping stones to success</li> </ul> <p><b>Writing Project Three:</b> Write an essay in which you compare one of the following pairs of concepts:</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
			<ul style="list-style-type: none"> <li>• Hearing-Listening</li> <li>• Liberty-License</li> <li>• Servant-Slave</li> <li>• Talent-Ability</li> </ul> <p>Integrate into your essay a historical or current event in which the pairs have played a part in a turn of events.</p> <p><b>Writing Project Four:</b> Write an essay in which you argue that movies often portray minorities inaccurately or offensively. Be specific with facts and examples.</p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
<p><b>Unit Four: A World at War</b> <b>Timeline: 8 weeks</b></p>			
<p>CC11-12RL1 CC11-12RL2 CC11-12RL5 CC11-12RL6 CC11-12W2a CC11-12W2b CC11-12W2c CC11-12W2d CC11-12W2e CC11-12W2f CC11-12W4 CC11-12W5 CC11-12W6 CC11-12W7 CC11-12W8 CC11-12W10 CC11-12SL1a CC11-12SL1c CC11-12SL1d CC11-12SL2 CC11-12SL3</p>	<p>Writing is conversation about a topic. When a writer writes, s/he is contributing to the conversation about that topic.</p> <p>A writer selects form and mode of development based on the purpose for writing.</p> <p>Good researchers start with a clear purpose, topic, and audience when doing research.</p> <p>Good researchers employ strategies to help them research information.</p>	<p>What is war? Is war avoidable?</p> <p>When is war justified?</p> <p>Why does writing well matter? What is the impact on my life of speaking and writing well?</p> <p>What is the rhetorical situation of a piece of writing? Why did this writer want to contribute these thoughts and ideas at this point in history?</p> <p>In what ways do researchers gather information?</p> <p>What is an authoritative source?</p> <p>Why do good researchers avoid</p>	<p><b>Literature for Analysis:</b></p> <ul style="list-style-type: none"> <li>○ Analyzing point of view: speaker, occasion, audience, purpose, subject, tone</li> <li>○ Analyzing tone: diction, imagery, theme, style</li> <li>○ Rhetorical analysis and annotating text: diction, unity, coherence, audience, tone, syntax</li> <li>○ Analyzing definition and compare/contrast,</li> <li>○ Short Works: poetry, short stories, essays, nonfiction</li> <li>○ William Shakespeare – <i>Henry V</i></li> </ul> <p><b>Writing/Composition Skills:</b></p> <ul style="list-style-type: none"> <li>○ Specificity in diction choices</li> <li>○ Evidence/details and the rhetorical situation</li> <li>○ Informal writing assignments to assist students in learning to apply knowledge of speaker, occasion, audience, purpose, subject, tone</li> <li>○ comprehending the text, analyzing rhetoric, and as prewriting for longer paper.</li> <li>○ Writing analysis paragraphs: title/topic of section, attitude (+ because...), device/characteristic, explanation of device, quote/examples, interpretation/analysis, tie it back to attitude</li> <li>○ Strategy for writing introductions – title and author, topic of prompt, attitude/tone, [audience, point of view, purpose, and structure – when</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
CC11-12L1a CC11-12L1b CC11-12L2a CC11-12L2b CC11-12L3a	Good research comes from a variety of accurate, reliable and valid sources.	plagiarizing?	<p>appropriate].</p> <ul style="list-style-type: none"> <li>○ Strategies for writing conclusions – author’s lesson, reader’s learning – specific and global, character’s learning (if appropriate), connections, biases revealed, ending of the work</li> <li>○ Practice exercises in compare/contrast, process analysis, division and classification</li> <li>○ Time writings and common assessments</li> </ul> <p><b>Writing Project One:</b> Comparing author’s point of view</p> <p><b>Writing Project Two:</b> Extended definition of an abstract notion</p> <p>Research Project:</p> <ul style="list-style-type: none"> <li>○ Forming questions for research</li> <li>○ Refining topics and defining research questions.</li> <li>○ Developing a thesis statement</li> <li>○ Understanding the writing context</li> <li>○ Finding and evaluating sources</li> <li>○ Citing evidence in MLA format</li> <li>○ Summarizing and documenting sources</li> <li>○ Intellectual theft – stealing ideas (avoiding plagiarism)</li> <li>○ Tying research to research questions</li> </ul>
<b>Unit Five: Re-Writing Your Writing</b> <b>Timeline: 4 weeks</b>			
CC11-12 SL 1a CC11-12 SL 1b CC11-12 SL 1c CC11-12 SL 1d CC11-12 SL 2 CC11-12 W 4 CC11-12 W 5 CC11-12 W 6 CC11-12L6	<p>Writing is a process that uses skills, strategies, and practices for creating a variety of texts.</p> <p>Writing is strengthened through revision.</p>	<p>How does the writing process refine skills, increase confidence, and shape insight? How do writers communicate purposefully and clearly with various audiences?</p> <p>How do effective writers hook and hold readers and make writing easy to follow?</p> <p>How does revising and editing strengthen ideas, organization,</p>	<p>Students will be presented with different examples of writing (informational, narrative and persuasive) at various stages in the writing process. Students will be required to make editorial changes/suggestions and present their suggestions to the class.</p> <p>Students will choose a previous personal writing. Through an opportunity to have the piece both peer and self assessed based on specific criteria, the students will re-edit the piece after this unit to show growth in writing.</p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>● Ongoing informal assessment through discussion and observation</li> <li>● Teacher made comprehension tests</li> <li>● Note taking and graphic organizers</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
		voice, word choice sentence fluency, and conventions?	<ul style="list-style-type: none"> <li>Additional Text Analysis questions from the text.</li> </ul>
<b>Unit Six: Special Writing Projects</b> <b>Timeline: 8 weeks</b>			
CC11-12 W 1a CC11-12 W 1b CC11-12 W 1c CC11-12 W 1d CC11-12 W 1e CC11-12 W 2a CC11-12 W 2b CC11-12 W 2c CC11-12 W 2d CC11-12 W 2e CC11-12 W 2f CC11-12 W 4 CC11-12 W 5 CC11-12 W 6 CC11-12 W 7 CC11-12 W 8 CC11-12 W 9a CC11-12 W 9b CC11-12RI7 CC11-12RI8 CC11-RI10	<p>Good research comes from a variety of sources.</p> <p>Good researchers employ strategies to help them research information.</p> <p>Good researchers present critically selected information without plagiarizing.</p> <p>Good researchers extract information from accurate and valid sources and draw logical conclusions.</p> <p>Good research is shared in effective ways with intended audiences and for specific purposes.</p>	<p>What is the purpose for research?</p> <p>In what ways do researchers gather information?</p> <p>How does a researcher know that the information is accurate?</p> <p>What is an authoritative source?</p> <p>How can the use of technology enhance research?</p>	<p>Students will evaluate/analyze the following texts while learning about research and formatting:</p> <ul style="list-style-type: none"> <li><i>Choosing Single Motherhood: A sign of modern times?</i></li> <li><i>Development of a Scale to Detect Sexual Harasses: The Potential Harasser Scale</i></li> </ul> <p><b>Writing Project One: The Research Paper</b>            Students will conduct research on the topic of their choice. They will format their final essay in both MLA and APA formats. Check points throughout the weeks will be established to keep students on track.</p> <p><b>Writing Project Two: The Literary Paper</b>            Students will choose a literary work read in class this school year. Students will then write an essay analyzing the work for its use of theme, character, plot and symbolism. Students will also comment on the form of the writing.</p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>Ongoing informal assessment through discussion and observation</li> <li>Teacher made comprehension tests</li> <li>Note taking and graphic organizers</li> <li>Additional Text Analysis questions from the text.</li> </ul>

## Curriculum Framework for World Literature

School: Newark Charter School

Curricular Tool: McDougal Littell World Literature

Grade: 12

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
<b>Senior Project</b> <b>Timeline: 8 weeks – 2 weeks per marking period</b>			
CC 11-12 SL 2 CC 11-12 SL 4 CC 11-12 SL 5 CC 11-12 SL 6 CC 11-12 W 2 CC 11-12 W 4 CC 11-12 W 5 CC 11-12 W 6 CC 11-12 W 7 CC 11-12 W 8 CC 11-12 W 9 CC 11-12 W 10 CC11-12L1a CC11-12L1b CC11-12L2a CC11-12L2b CC11-12L3 CC11-12L3a CC11-12L6	<p>Good research comes from a variety of sources.</p> <p>Good researchers employ strategies to help them research information.</p> <p>Good researchers present critically selected information without plagiarizing.</p> <p>Good researchers extract information from accurate and valid sources and draw logical conclusions.</p> <p>Good research is shared in effective ways with intended audiences and for specific purposes.</p>	<p>What is the purpose for research?</p> <p>In what ways do researchers gather information?</p> <p>How does a researcher know that the information is accurate?</p> <p>What is an authoritative source?</p> <p>How can the use of technology enhance research?</p>	<p><u>First Marking Period:</u></p> <ul style="list-style-type: none"> <li>○ Identify two problems or challenges that exist within your field of study. This may require students to talk with mentors and to do some library research.</li> <li>○ Interview three people from your field to gain perspective on the problems you have identified.</li> <li>○ Briefly research each problem to identify potential library and internet resources.</li> <li>○ Select one of the problems and write a research proposal using information from your interviews and library research.</li> </ul> <p><u>Second Marking Period:</u></p> <ul style="list-style-type: none"> <li>○ Complete research on the problem</li> <li>○ Research will include library research, interviews, document analysis, job shadowing, and surveys</li> <li>○ Students will use the research process learned during their junior year.</li> </ul> <p><u>Third Marking Period:</u></p> <ul style="list-style-type: none"> <li>○ Students will write their papers. Sections will include identifying the problem and source (if known), discussing the issues around why it is a problem for that area, barriers to solving the problem, possible and realistic solutions for the problem, and analysis of how and why those solutions will work.</li> <li>○ Students will use the writing process, proceeding through several drafts with peer review and teacher conferences.</li> <li>○ Students will evaluate their information and research and CCs synthesize it into their research paper.</li> <li>○ Students will be required to use graphic features in their research paper: drawings, graphs, diagrams, photographs.</li> </ul> <p><u>Fourth Marking Period:</u></p> <ul style="list-style-type: none"> <li>○ Students will prepare their presentation of the work for their senior project committee. In most cases, the presentation will be a Power Point presentation; multimedia, video and graphics, will be required.</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
			<ul style="list-style-type: none"> <li>○ The English teacher will assess the written research paper, but the committee will assess the final project. Rubrics will be used in each case.</li> </ul>
<b>Unit One: Ancient Literature – Mesopotamia, Egypt and India</b> <b>Timeline: 4 weeks</b>			
CC 11-12 RL 1 CC 11-12 RL 3 CC 11-12 RL 4 CC 11-12 RL 5 CC 11-12 RL 10 CC 11-12 RI 4 CC 11-12 RI 5 CC 11-12 W 3a CC 11-12 W 3b CC 11-12 W 3c CC 11-12 W 3d CC 11-12 W 4 CC 11-12 W 5 CC 11-12 SL 1a CC 11-12 SL 1b CC 11-12 SL 1c CC 11-12 SL 1d	Sometimes the writer makes his meaning plain; often, however, a reader must go beyond the surface to find the meaning.  Understanding of text develops over time and experience.	What do good readers do?  Why should a writer write like a reader?  How does writing preserve immortality?  Why conduct research?  What is the purpose for research?	From <i>The Epic of Gilgamesh</i>  From <i>The Book of the Dead</i>  <i>I'm Going Downstream on Kingswater Canal</i>  From <i>the Mahabharata Arjuna, the Mighty Archer</i>  <i>Rama and Ravana in Battle</i>  <i>Arrow of the Blue Skinned God</i>  After reading discuss/journal issues in literature and make connections to history and modern day life: roles of women, the use and abuse of power, friendship, and the importance of the epic in a particular society or culture.  <b>Personal and Reflective Writing:</b> Write an essay about a memorable incident from your own life.  Additional Assessment: <ul style="list-style-type: none"> <li>● Ongoing informal assessment through discussion and observation</li> <li>● Teacher made comprehension tests</li> <li>● Note taking and graphic organizers</li> <li>● Additional Text Analysis questions from the text.</li> </ul>
<b>Unit Two: Greek and Roman Literature</b> <b>Timeline: 4 weeks</b>			
CC 11-12 RL 1 CC 11-12 RL 2 CC 11-12 RL 3 CC 11-12 RL 4 CC 11-12 RL 5 CC 11-12 RL 8 CC 11-12 RL 9	Through the ages literature celebrates and defines heroes by telling their stories.	What is the relationship between reader and writer?  How is literature reflective of the time period in which it is written?	<i>The Iliad, books 1, 6, 22 and 24</i> <ul style="list-style-type: none"> <li>● Have students make comparisons between the epic from the <i>Mahabharata Arjuna, the Mighty Archer</i> and the books of <i>The Iliad</i>. What commonalities exist based on genre? What differences exist based on cultural influences?</li> </ul> <i>Oedipus the King</i>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
CC 11-12 RL 10 CC11-12L4a CC11-12L4b CC11-12L4c CC11-12L4d			<p><i>The Story of Daedalus and Icarus</i></p> <ul style="list-style-type: none"> <li>• Make reasonable assertions about the author’s arguments by using the text.</li> <li>• Analyze the authors’ beliefs about subjects citing the text for support.</li> </ul> <p><i>Seize the Day</i>  <i>Better to Live, Licinius</i></p> <ul style="list-style-type: none"> <li>• In addition to the analyses above, interpret these two poems in terms of current times.</li> </ul> <p><i>From History of the Peloponnesian War Pericles’ Funeral Oration by Thucydides</i></p> <ul style="list-style-type: none"> <li>• Read and respond to historical implications in a text.</li> <li>• “Mighty indeed are the marks and monuments of our empire which we have left. Future ages will wonder at us, as the present age wonders at us now.” Investigate the roots of this assertion. Have students make connections between the words of Thucydides and the culture of that time, then compare the “marks and monuments” of his time to any marks and/or monuments that students believe their generation has left or will leave on their culture or society as a whole.</li> </ul> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
<b>Unit Three: Traditions in Chinese and Japanese Literature</b> <b>Timeline: 6 weeks</b>			
CC 11-12 RL 1 CC 11-12 RL 2 CC 11-12 RL 3 CC 11-12 RL 4 CC 11-12 RL 5 CC 11-12 RL 7 CC 11-12 RL 10 CC 11-12 RI 1 CC 11-12 RI 2 CC 11-12 RI 10 CC 11-12 W 1a	<p>Great literature provides rich and timeless insights into the key themes, dilemmas, and challenges we face. They present complex stories in which the inner and outer lives of human beings are revealed.</p> <p>In the 20<sup>th</sup> century, southwest Asia became a focus of great political, social, and economic</p>	<p>What is the most essential function of writing?</p> <p>How are the “secrets of life” revealed by the sacred texts of southwest Asia?</p> <p>What influence does the dominating culture have over the literature and writing, and development of a weaker</p>	<p><b>Reading skills and strategies:</b> evaluating historical influences, summarizing, connecting to literature, identify problem/solution, analyze cause/effect relationships, clarify meaning, analyze persuasive techniques, recognize author’s purpose, connect to contemporary issues, preview/predicting</p> <p><b>Literary elements:</b> literary periods, literary genres, point of view, imagery, rhyme scheme, speaker, personification</p> <p><b>Free response to poetry:</b> connecting, questioning, inferencing</p>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
CC 11-12 W 1b CC 11-12 W 1c CC 11-12 W 1d CC 11-12 W 1e CC 11-12 W 2a CC 11-12 W 2b CC 11-12 W 4 CC 11-12 W 5 CC 11-12 W 7 CC 11-12 W 8 CC 11-12 W 9 CC11-12L5a CC11-12L5b	upheaval which has led to violent conflicts among Muslims, Israelis, and Westerners.	culture?  How have recent political and cultural events affected the contemporary literature of southwest Asia?  How do texts about social and political issues affect me?	<p><b>Research/Data Collection:</b>            Big ideas/essential questions I-chart            Literature-based vocabulary instruction            Nonfiction text commenting on topics related to historical Period</p> <p><b><u>The Woman Warrior</u></b> by Maxine Hong Kingston            Students keep a reading journal to analyze Kingston’s purpose for writing the memoir, <u>The Woman Warrior</u>.</p> <ul style="list-style-type: none"> <li>• Analyze the function of Kingston’s choices in her memoir. What is the function of including the folktale of Fa Mu Lan?</li> <li>• What literary techniques does Kingston utilize in her memoir (recall, metaphor etc)? Are some of these techniques more effective than others?</li> <li>• What kind of work ethic does her mother have? What is its impact on Kingston?</li> <li>• Final Assessment: write a 3 to 5 page paper analyzing any chapter of the memoir in depth.</li> </ul> <p><b>Shorter works:</b>            literary history, poetry, short story, informational text</p> <ul style="list-style-type: none"> <li>• <i>From the Analects</i></li> <li>• <i>Tao Te Ching</i> <ul style="list-style-type: none"> <li>○ Critical thinking and extension questions</li> <li>○ Students decipher meaning of the Analects and the Tao Te Ching. What do they mean by today’s standards? Do some of these still ring true?</li> <li>○ How do the Analects and the Tao Te Ching differ in content, seriousness, quality, and meaning? Engage students in pairs as thought partners to identify which they feel warrant more respect as literary subjects.</li> </ul> </li> <li>• <i>Taoist Tale: The Fish Rejoice</i></li> <li>• <i>Book of Odes</i></li> <li>• <i>The River Merchant’s Wife</i></li> <li>• <i>Still Night Thoughts</i> <ul style="list-style-type: none"> <li>○ Which details from each aid the reader in visualization? How</li> </ul> </li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
			<p>do these details assist you in reading and interpreting text that is not written in the vernacular?</p> <ul style="list-style-type: none"> <li>• <i>Dreaming of Li Po</i></li> <li>• <i>Jade Flower Palace</i></li> <li>• <i>Two Springs</i></li> <li>• <i>On Plum Blossoms</i> <ul style="list-style-type: none"> <li>○ In the speaking of loss, how is tone used in each of the poems to demonstrate the feelings of loss or sadness? How are the ones different when the loss is not a permanent one?</li> <li>○ Students write a combined poem in which all the women from the four poems meet each other to speak of their loss and loneliness. Students weave the speakers of each poem into one poem regarding sadness and loss.</li> </ul> </li> <li>• <i>Zen Teachings</i></li> <li>• <i>Zen Parables</i> <ul style="list-style-type: none"> <li>○ How are the Zen Teachings represented in the Zen Parables? How are the teachings put into practice to teach a lesson?</li> <li>○ Students identify an area of need in today's society and write a "Zen" style teaching regarding the need. They then write a parable putting that teaching into place. Students teachings and parables are presented to the class.</li> </ul> </li> <li>• <i>The Deserted Crone</i> <ul style="list-style-type: none"> <li>○ What does the moon represent? How does the light shone compare with that of other deities? Use details to support your response.</li> </ul> </li> </ul> <p><b>Informative Writing:</b> The Problem-Solution Essay</p> <ul style="list-style-type: none"> <li>• Write an essay discussing a current events problem. Research the issue and present possible solutions to the issue.</li> </ul> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
<b>Unit Four: European Literature</b> <b>Timeline: 6 weeks</b>			
CC 11-12 RL 1 CC 11-12 RL 3 CC 11-12 RL 4 CC 11-12 RI 1 CC 11-12 RI 3 CC 11-12 RI 4 CC 11-12 RI 5 CC 11-12 RI 6 CC 11-12 RI 7 CC 11-12 W 1 CC 11-12 W 3a-e CC 11-12 SL 3 CC 11-12 SL 4 CC 11-12 SL 6	<p>Good readers ask questions about text to better understand what ideas require making inferences.</p> <p>Modernist literature challenges the reader to consider various ways to represent reality.</p> <p>Romanticism and realism exist on a continuum that presents various perspectives on reality.</p> <p>Through the ages literature celebrates and defines heroes by telling their stories.</p> <p>Medieval literature sought to harmonize beliefs of religious faith growing scientific reasoning.</p> <p>The Renaissance and the humanistic movement reflect a shift in literature away from religious influence.</p>	<p>What is the relationship between reader and writer?</p> <p>How is literature reflective of the time period in which it is written?</p> <p>What makes a text great? What is the relationship between popularity and greatness in text?</p> <p>What is Romanticism? To what degree is Romanticism reflected in current culture?</p>	<p><b>The Middle Ages</b></p> <ul style="list-style-type: none"> <li>• The Song of Roland</li> <li>• Perceval: The Story of the Grail</li> <li>• The Lay of the Were-Wolf               <ul style="list-style-type: none"> <li>○ Identify the elements of these selections that make them seem “Fairy Tale-like.” Can they be connected to any modern fairy tales? Have any modern fairy tales borrowed ideas from these origins?</li> <li>○ Students pair for read and respond journals.</li> </ul> </li> </ul> <p>Author Study: Dante Alighieri</p> <p><b>The Renaissance and Enlightenment</b></p> <ul style="list-style-type: none"> <li>• The Decameron</li> <li>• The Art of Courtly Love               <ul style="list-style-type: none"> <li>○ How does the first line taint the opinion of the reader on the narrator?</li> <li>○ Reflection journal.</li> </ul> </li> <li>• Utopia               <ul style="list-style-type: none"> <li>○ Students create their own Utopia, categorizing it much like was done in the excerpt read from Sir Thomas More.</li> <li>○ How does More demonstrate that education is of vast importance to him?</li> </ul> </li> <li>• Don Quixote               <ul style="list-style-type: none"> <li>○ Students summarize the excerpt from Don Quixote. They then predict, in an essay, what they think the rest of the story would be about, citing specific evidence from the excerpt to support their opinions.</li> </ul> </li> </ul> <p><b>Romanticism</b></p> <ul style="list-style-type: none"> <li>• Faust</li> <li>• The World is too much with us</li> <li>• My Heart Leaps Up</li> <li>• Shaman Song</li> <li>• A Piece of String               <ul style="list-style-type: none"> <li>○ Dramatic pair readings.</li> <li>○ Literary analysis with the use of literary elements.</li> <li>○ Identify how the natural elements have again found their way into the selections “My Heart Leaps Up” and</li> </ul> </li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
			<p>“Shaman Song.” How does this speak to both romantic and transcendental ideals?</p> <ul style="list-style-type: none"> <li>○ Reflection journal</li> <li>○ Rubrics</li> </ul> <ul style="list-style-type: none"> <li>• Author Study: Leo Tolstoy</li> </ul> <p><b>Persuasive Speech:</b> Write and deliver a persuasive speech on the topic of your choice.</p> <ul style="list-style-type: none"> <li>• Your topic should correlate to your senior project or current readings</li> <li>• You also critique and comment on the speeches of peers.</li> </ul> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
<p><b>Unit The Americas-Early and Modern</b> <b>Timeline: 4 weeks</b></p>			
<p>CC11-12RL6 CC11-12RL9 CC11-12W4 CC11-12W7 CC11-12W8 CC 11-12 W 9a CC 11-12 W 9b CC11-12SL1a CC11-12SL1c CC11-12SL1d CC11-12L1 CC11-12L2a CC11-12L2b CC11-12L3a</p>	<p>The early American cultures used literature to explain the world around them and their relationship with the world and the gods.</p> <p>The era of European exploration and conquest reshaped the ancient customs, literature, creating a legacy that challenges notions of identity, injustice, and multiculturalism. The Magic realism featured in some modern Latino literature explores the relationship between perception and reality.</p> <p>Both modern Latino and Native American literature explores the connections</p>	<p>What does a good reader do?</p> <p>From whose viewpoint are we reading?</p> <p>What happens when one culture imposes its values and beliefs on another?</p> <p>How is the legacy of colonialism reflected to modern literature from the Americas</p>	<p><b>Reading skills and strategies:</b> evaluating historical influences, connecting to literature, analyzing cultural context, analyzing sensory details, analyze figures of speech, determining main ideas and supporting details, identifying author’s purpose</p> <p><b>Literary Elements:</b> literary periods, setting, point of view, juxtaposition, figurative language</p> <p><b>Free response to poetry:</b> <i>Day of Doom</i> by Michael Wigglesworth <i>Tenth Muse</i> by Anne Bradstreet</p> <p><i>The Dogood Papers</i> by Ben Franklin</p> <ul style="list-style-type: none"> <li>○ Analyze the purpose/function of the Dogood papers, and the need for the pen name Silence Dogood.</li> </ul> <p><b>Research Strand/Data Collection:</b> Big ideas/essential questions I-chart Literature-based vocabulary instruction Selected literature from North American Native Americas, Mayan, and Aztec cultures and the colonization of North and South Americas Informative text on topics related to historical period</p>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
	between the natural world and social issues, stressing geography and sensory experience.		<p><b>Writing Workshop:</b> Expressive Writing – Personal Memoir</p> <ul style="list-style-type: none"> <li>○ Development</li> <li>○ Style/voice</li> </ul> <p>Grammar taught in the context of student writing</p> <p><b>Reading skills and strategies:</b> monitoring comprehension, evaluating figurative language, analyzing tone, identifying sequence, visualizing, analyzing conflict, analyzing characterization, analyzing historical context, connecting to literature</p> <p><b>Literary Elements:</b> literary periods, metaphor, alliteration, oxymoron, point of view, setting and mood, style, dialect and idiom, symbol</p> <p><b>Literary analysis presentation</b> Selected short stories and poetry from North, Central, and South America</p> <p><b>Comparative literature:</b> Poetry and nonfiction</p> <p><b>Writing Workshop:</b> Expressive Writing – Personal Memoir</p> <ul style="list-style-type: none"> <li>○ Development</li> <li>○ Style/voice</li> </ul>
<p><b>Unit Five: Africa and the Middle East</b> <b>Timeline: 4 weeks</b></p>			
CC 11-12 RL 2 CC 11-12 RL 3 CC 11-12 RL 4 CC 11-12 RL 5 CC 11-12 RL 6 CC 11-12 RL 7 CC 11-12 W 1 CC 11-12 W 4 CC 11-12 W 5 CC 11-12 W 7	<p>Sometimes the writer makes his meaning plain; often, however, a reader must go beyond the surface to find the meaning.</p> <p>Understanding of text develops over time and experience.</p>	<p>Why read nonfiction?</p> <p>How do various text structures influence the author’s message or meaning?</p> <p>How do African authors explore the connections and contrasts between traditional</p>	<p><b>Reading skills and strategies:</b> Analyzing graphic information, evaluating historical influences, connecting to the literature, comparing/contrasting, distinguishing between fact and opinion, activating prior knowledge, analyze cultural context, questioning, analyzing suspense, analyzing text structure, previewing and predicting</p> <p><b>Literary elements study:</b> literary periods, motivation, tone, setting, situational irony, connecting, questioning, inferencing</p> <p>Free response to poetry</p>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
<p>CC 11-12 W 10 CC11-12L5a CC11-12L5b</p>	<p>Trickster tales are often told to reinforce morals about behavior or the nature of wisdom.</p> <p>Authors use different techniques/strategies to convince readers. Readers must apply criteria to evaluate credibility of information.</p> <p>Imperialism and the struggle of Africans to regain their freedoms have affected both black and white Africans and is documented by African writers.</p> <p>African authors have captured in many forms the problems created by independence.</p>	<p>and modern African ways of life?</p> <p>How does writing preserve immortality?</p>	<p>Research/Data Collection: Big ideas/essential questions</p> <p>Literature-based vocabulary instruction</p> <p>Shorter Works: Short stories, articles, essays</p> <p>Novel: <i>Things Fall Apart</i> Chinua Achebe Nonfiction text commenting on topics related to historical period</p> <p>Speech on Issues of Genocide</p> <p><b>Writing Workshop:</b> Persuasive Writing – Genocide and the World</p> <ul style="list-style-type: none"> <li>○ Development (review)</li> <li>○ Style (review)</li> <li>○ Organization (review)</li> <li>○ Word choice (review)</li> <li>○ Sentence fluency</li> </ul> <p>Writing a Short Story Grammar taught in the context of student writing</p> <p><b>Persia and Arabia</b></p> <ul style="list-style-type: none"> <li>● From The Koran</li> <li>● The Thousand and One Nights</li> <li>● Birdsong from inside the egg</li> <li>● Gulistan <ul style="list-style-type: none"> <li>○ How are the subjects that Rumi and Sadi choose to write on indicative of their Sufi lifestyles?</li> <li>○ Choose three of the “truths” and explain for students to explain in their own words. Are these “truths” still relevant by today’s standards? Why or why not?</li> </ul> </li> </ul> <p><b>West African Oral Literature</b></p> <ul style="list-style-type: none"> <li>● How the World was Created from a Drop of Milk</li> <li>● The First Bard among the Soninke</li> <li>● Sundiata</li> <li>● Childhood</li> <li>● The Lion’s Awakening</li> <li>● Praise Songs for Orishas</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
			<ul style="list-style-type: none"> <li>○ Analyzing the relationships in terms of chronology, cause and effect relationships, hierarchical, and constituencies.</li> </ul> <p><b>Trickster Tales</b></p> <ul style="list-style-type: none"> <li>• Anansi the Spider</li> <li>• Iktomi the Spider <ul style="list-style-type: none"> <li>○ Interpret the themes in these two tales. Although they spring from different cultures, how are the themes similar? How are they different? How does culture affect the theme, if at all?</li> </ul> </li> </ul> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>

## **Curriculum Framework for Advanced Placement English Literature and Composition**

School: Newark Charter School

Curricular Tool: Literature: Reading Fiction, Poetry, Drama

Grade: 12

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
<b>Senior Project</b> <b>Timeline: 8 weeks total / 2 weeks per marking period</b>			
CC 11-12 SL 4 CC 11-12 SL 5 CC 11-12 SL 6 CC11-12W2a CC11-12W2b CC11-12W2c CC11-12W2d CC11-12W2e CC11-12W2f CC 11-12 W 4 CC 11-12 W 5 CC 11-12 W 6 CC 11-12 W 7 CC 11-12 W 8 CC 11-12 W 9a CC-11-12 W9b CC 11-12 W 10 CC11-12L1a CC11-12L1b CC11-12L2a CC11-12L2b CC11-12L3 CC11-12L6	<p>Good research comes from a variety of sources.</p> <p>Good researchers employ strategies to help them research information.</p> <p>Good researchers present critically selected information without plagiarizing.</p> <p>Good researchers extract information from accurate and valid sources and draw logical conclusions.</p> <p>Good research is shared in effective ways with intended audiences and for specific purposes.</p>	<p>What is the purpose for research?</p> <p>In what ways do researchers gather information?</p> <p>How does a researcher know that the information is accurate?</p> <p>What is an authoritative source?</p> <p>How can the use of technology enhance research?</p>	<p><u>First Marking Period:</u></p> <ul style="list-style-type: none"> <li>○ Identify two problems or challenges that exist within your field of study. This may require students to talk with mentors and to do some library research.</li> <li>○ Interview three people from your field to gain perspective on the problems you have identified.</li> <li>○ Briefly research each problem to identify potential library and internet resources.</li> <li>○ Select one of the problems and write a research proposal using information from your interviews and library research.</li> </ul> <p><u>Second Marking Period:</u></p> <ul style="list-style-type: none"> <li>○ Complete research on the problem</li> <li>○ Research will include library research, interviews, document analysis, job shadowing, and surveys</li> <li>○ Students will use the research process learned during their junior year.</li> </ul> <p><u>Third Marking Period:</u></p> <ul style="list-style-type: none"> <li>○ Students will write their papers. Sections will include identifying the problem and source (if known), discussing the issues around why it is a problem for that area, barriers to solving the problem, possible and realistic solutions for the problem, and analysis of how and why those solutions will work.</li> <li>○ Students will use the writing process, proceeding through several drafts with peer review and teacher conferences.</li> <li>○ Students will evaluate their information and research and synthesize it into their research paper.</li> <li>○ Students will be required to use graphic features in their research paper: drawings, graphs, diagrams, and photographs.</li> </ul> <p><u>Fourth Marking Period:</u></p> <ul style="list-style-type: none"> <li>○ Students will prepare their presentation of the work for their senior project committee. In most cases, the presentation will be a Power</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
			<ul style="list-style-type: none"> <li>Point presentation; multimedia, video and graphics, will be required.</li> <li>The English teacher will assess the written research paper, but the committee will assess the final project. Rubrics will be used in each case.</li> </ul>
<b>Unit One: Modern Novel with Literature Circles and Reader’s Workshops</b>			
<b>Timeline: 3 weeks</b>			
CC11-12RL1 CC11-12RL2 CC11-12RL3 CC11-12RL4 CC11-12RL5 CC11-12RL6 CC11-12RL7 CC12 RL10 CC11-12SL1a CC11-12SL1b CC11-12SL1c CC11-12SL1d CC11-12SL3 CC11-12SL4 CC11-12L4a CC11-12L4c CC11-12L4d CC11-12L5a CC11-12L5b CC11-12L6	<p>Good readers employ strategies to help them to understand and think about text.</p> <p>Good readers may use many strategies that work, and they quickly try another one when the one they are using doesn’t work.</p> <p>Good readers not only know many different strategies, but they never get stuck in persisting with one that isn’t working.</p>	<p>Why is this novel you chose to read considered to be great?</p> <p>What is the author saying through the novel?</p> <p>How do you know that you are getting the point and not merely imposing your own views and experiences?</p> <p>What does a reader gain from talking with others about a text?</p>	<p>The first book, students will read in the literature circle format to provide scaffolding of peer discussion and analysis.</p> <p>The second book will be read in a readers’ workshop format to emphasize independent reading and analysis</p> <p>Students will annotate the texts and use other active reading strategies taught in the course as well as write an analytical paper for one of the novels.</p>
<b>Unit Two: Poetry</b>			
<b>Timeline: 6 weeks</b>			
CC 11-12 SL 1a CC 11-12 SL 1b CC 11-12 SL 1c CC 11-12 SL 1d CC 11-12 SL 2 CC 11-12 SL 3 CC 11-12 SL 4 CC 11-12 SL 5 CC 11-12 SL 6 CC 11-12 W 2a CC 11-12 W2b CC 11-12 W2c	<p>Poetry uses the musicality of words (property of sounding like music) to express emotions and insights.</p> <p>Poetry is open to personal interpretations.</p> <p>Words have unique roles and jobs in every sentence.</p>	<p>How do good readers and writers identify, understand, and use characteristics and elements of various types of poetry?</p>	<ul style="list-style-type: none"> <li>Actively reading poetry</li> <li>Rereading poetry</li> <li>Words and Images               <ul style="list-style-type: none"> <li>Reading for denotation</li> <li>Reading for connotation</li> <li>Reading for images</li> </ul> </li> <li>Practicing a methodology for the analysis of poetry: Title, paraphrase, connotation, attitude, shifts, title, theme</li> <li>Practicing close reading on selected passages from thematically linked literature – diction, word order, verb form, point of view, metaphor</li> <li>Literary terms and techniques as suggested by the literature</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
CC 11-12 W2d CC 11-12 W2e CC 11-12 W2f CC 11-12 W 4 CC 11-12 RL 1 CC 11-12 RL 2 CC 11-12 RL 3 CC 11-12 RL 4 CC11-12L4a CC11-12L4b CC11-12L4c CC11-12L4d CC11-12L5a CC11-12L5b			<p><b>Timed Writing:</b> Analysis of how a poet uses words and images to create an effect on the reader</p> <ul style="list-style-type: none"> <li>○ Voice, Tone, and Sound               <ul style="list-style-type: none"> <li>○ Reading for voice</li> <li>○ Reading a dramatic monologue</li> <li>○ <u>Reading for tone</u></li> <li>○ <u>Reading for irony</u></li> <li>○ <u>Reading for sound</u></li> </ul> </li> </ul> <p><b>Writing Project:</b> Comparing differences in voice, tone, and sound in two poems that are thematically linked, but otherwise very different.</p> <ul style="list-style-type: none"> <li>○ Form and Type               <ul style="list-style-type: none"> <li>○ Reading for lines</li> <li>○ Reading for stanzas</li> <li>○ Reading the English sonnet</li> <li>○ Reading the Italian sonnet</li> <li>○ Reading blank verse and couplets</li> <li>○ Reading free verse</li> <li>○ Reading for internal form</li> </ul> </li> </ul> <p><b>Writing Project:</b> Writing a sonnet</p> <ul style="list-style-type: none"> <li>○ Figurative Language               <ul style="list-style-type: none"> <li>○ Reading for simile</li> <li>○ Reading for metaphor</li> <li>○ Reading for personification</li> <li>○ Reading for metonymy and synecdoche</li> </ul> </li> </ul> <p><b>Writing Project:</b> Collect examples of figurative language from advertisement – TV, radio, print media. Write a short paper about how these figures make for effective advertising.</p> <ul style="list-style-type: none"> <li>○ Rhythm and Meter               <ul style="list-style-type: none"> <li>○ Reading for rhythm</li> <li>○ Reading for meter</li> </ul> </li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
			<p><b>Timed Writing:</b> Analysis comparing and contrasting two poems – one from the textbook and one from pop culture</p> <p><b>Writing Project:</b> Writing about poetry and social criticism. Given selected poems, how do the speakers address the social issues in the poems? How do the techniques and figures that the poets use support their commentary?</p> <p><b>Student Poetry Portfolio:</b> Students will write five original poems during this unit. At least one poem will be performed during a bi-weekly coffee house during the weeks of the unit.</p> <ul style="list-style-type: none"> <li>○ Students will be required to create a portfolio of original poems.</li> </ul> <p>Students will read, analyze, and compare works of poetry by the following authors:</p> <ul style="list-style-type: none"> <li>• W. H. Auden; Elizabeth Bishop; William Blake; Gwendolyn Brooks; Robert Browning; George Gordon, Lord Byron; Lorna Dee Cervantes; Geoffrey Chaucer; John Donne; Rita Dove; Paul Laurence Dunbar; Seamus Heaney; George Herbert; Garrett Hongo; Sylvia Plath; Edgar Allan Poe; Alexander Pope; Adrienne Rich; Anne Sexton; William Shakespeare; Percy Bysshe Shelley; Leslie Marmon Silko; William Carlos Williams; William Wordsworth; William Butler Yeats</li> </ul> <p>Poetry analysis should include class discussions/debates and written evaluations. The following elements should be addressed:</p> <ul style="list-style-type: none"> <li>• Structure, sound and sense</li> <li>• Denotation and connotation</li> <li>• Imagery</li> <li>• Figurative language</li> <li>• Paradox</li> <li>• Irony</li> <li>• Tone</li> <li>• Musical Devices</li> <li>• Theme</li> </ul> <p><b>Author Study</b> Students will conduct research on the life and works on one of the</p>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
			<p>following poets:</p> <ul style="list-style-type: none"> <li>• T.S. Eliot</li> <li>• John Keats</li> <li>• Alexander Pope</li> <li>• Alfred, Lord Tennyson</li> <li>• Walt Whitman</li> </ul> <p>Author studies should be presented in written form as well as a presentation. Presentations should include a multimedia facet such as power point.</p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
<p><b>Unit Three: Drama</b>  <b>Timeline: 6 weeks</b></p>			
<p>CC 11-12 RL 1  CC 11-12 RL 3  CC 11-12 RL 4  CC 11-12 RL 5  CC 11-12 RL 6  CC 11-12 RL 9  CC 11-12 RL 10  CC 11-12 W 3a  CC 11-12 W 3b  CC 11-12 W 3c  CC 11-12 W 3d  CC 11-12 W 3e  CC 11-12 W 4  CC 11-12 W 5  CC 11-12 SL 1a  CC 11-12 SL 1b  CC 11-12 SL 1c  CC 11-12 SL 1d  CC11-12L5a  CC11-12L5b</p>	<p>Drama is a reflection of history and culture.</p> <p>Understanding the world’s historical events helps to portray the drama medium of that time period.</p> <p>Cultural and historical research supports artistic choices in the set, costume, sound, lighting, props, make-up, etc.</p> <p>The impact of literature on a reader is influenced by the reader’s experience.</p> <p>The reader’s interaction with the text changes with time and experience.</p>	<p>How did technology change the methods of dramatic expression?</p> <p>What are the different forms of drama today?</p> <p>What does the modern forms of drama reveal about today’s society?</p> <p>How did theatrical styles in the past influence those cultures?</p> <p>How have the events in history molded drama?</p> <p>What were the different types of drama performed in the past?</p> <p>Why is it important to research a</p>	<ul style="list-style-type: none"> <li>○ Practicing close reading on selected passages– diction, word order, verb form, point of view, metaphor</li> <li>○ Literary terms and techniques as suggested by the literature</li> <li>○ Theaters and Their Influence <ul style="list-style-type: none"> <li>○ The Greek Theater</li> <li>○ The Elizabethan Theater</li> <li>○ The Modern Theater</li> <li>○ The Contemporary Theater</li> </ul> </li> <li>○ Dramatic Types and Their Effects <ul style="list-style-type: none"> <li>○ Tragedy</li> <li>○ Comedy</li> <li>○ Other dramatic types</li> </ul> </li> <li>○ <u>Literature Circles</u>: Sophocles’ <i>Antigone</i>, Ibsen’s <i>A Doll’s House</i>, Guare’s <i>Woman at a Threshold</i></li> </ul> <p><b>Author Study:</b>  The instructor can choose one of the following playwrights to use as an author study.  Aeschylus; Edward Albee; Samuel Beckett; Anton Chekhov; Lillian Hellman; David Henry Hwang; Henrik Ibsen; Marsha Norman; Sean</p>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
		<p>time period for dramatizations?</p> <p>Why are some shows performed over and over again throughout history?</p>	<p>O’Casey; Eugene O’Neill; Sophocles; Tom Stoppard; Luis Valdez; Oscar Wilde; Tennessee Williams; August Wilson</p> <p>During this in depth look at an author several works should be read, addressed and comparative writings should occur. Students will conduct research and write an essay analyzing the playwright’s life and correlations/implications on the works of the author.</p> <p><b>A Raisin in the Sun – Lorraine Hansberry</b> Have student research another African-American woman writer, such as Zora Neale Hurston, Toni Morrison, or Alice Walker. Instruct students to write a comparison between the life and work of Lorraine Hansberry and that writer. Have them note similarities and differences in their work and how it reflects their feelings about such issues as civil rights and the African-American family.</p> <p><b>An Enemy of the People – Henrik Ibsen</b> Students will analyze the class structures presented in the drama. How might perception of the drama differ now, compared to when Ibsen wrote the play?</p> <p>Consider the following:</p> <ol style="list-style-type: none"> <li>1. How does Hovstad's standing in society shape his political beliefs?</li> <li>2. Does Doctor Stockmann exhibit any signs of class bias? If so, what are they?</li> <li>3. By the end of the play, what does the Doctor decide will cure society's corruption? How does he plan to achieve this ideal?</li> <li>4. How do issues of class affect each character's actions in the play?</li> </ol> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
<p><b>Unit Four: Fiction</b> <b>Timeline: 6 weeks</b></p>			
CC 11-12 RL 1	Readers interpret text by reading	How does what you know help	○ Actively reading fiction

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
CC 11-12 RL 2 CC 11-12 RL 3 CC 11-12 RL 4 CC 11-12 RL 9 CC 11-12 RL 10 CC 11-12 SL 1a CC 11-12 SL 1b CC 11-12 SL 1c CC 11-12 SL 1d CC 11-12 SL 2 CC 11-12 W 4 CC 11-12 W 5 CC 11-12 W 6 CC11-12L4a CC11-12L4b CC11-12L4c CC11-12L4d	<p>thoroughly and with purpose to determine main ideas and the facts and details used to support them.</p> <p>Readers continually monitor and check their interpretations of the author’s intent and meaning. Background knowledge supports understanding of text.</p> <p>Our perceptions of those close to us can be altered by large events.</p> <p>The world we live in is reflected in literature.</p> <p>What we read affects how we make sense of our own world, the world around us, and of others.</p>	<p>you understand text?</p> <p>How does thinking about the author’s purpose and message deepen understanding?</p> <p>How do text features and characteristics of informational and literary text influence reader interpretation?</p>	<ul style="list-style-type: none"> <li>○ General analysis of style: speaker, audience, context, diction, details, allusions, syntax, repetition, tone</li> <li>○ Practicing close reading on selected passages from thematically linked literature – diction, word order, verb form, point of view, metaphor</li> <li>○ Literary terms and techniques as suggested by the literature</li> <li>○ Beginning of the Plot               <ul style="list-style-type: none"> <li>○ Chronological order vs. starting in the middle</li> <li>○ Physical, social, internal/psychological conflict</li> </ul> </li> <li>○ Middle of the Plot               <ul style="list-style-type: none"> <li>○ Techniques and structures: suspense, foreshadowing, repetition, climax, epiphany</li> <li>○ Inevitable, intentional, unintentional gaps</li> </ul> </li> <li>○ Ending of the Plot               <ul style="list-style-type: none"> <li>○ Sense of wholeness</li> <li>○ Dénouement</li> <li>○ Feeling of finality</li> </ul> </li> <li>○ Techniques of Characterization               <ul style="list-style-type: none"> <li>○ Telling, showing, saying, entering a character’s mind, naming, motivation, consistency</li> </ul> </li> <li>○ Types of Characterization               <ul style="list-style-type: none"> <li>○ Round/flat characters</li> <li>○ Major/minor characters</li> <li>○ Protagonist/antagonist</li> </ul> </li> <li>○ Setting               <ul style="list-style-type: none"> <li>○ Setting as time and place</li> <li>○ Cultural contexts</li> <li>○ Effects of setting</li> </ul> </li> <li>○ Symbols in Fiction               <ul style="list-style-type: none"> <li>○ Recognizing symbols</li> <li>○ Literary symbols</li> <li>○ Conventional and traditional symbols</li> <li>○ Archetypal symbols</li> </ul> </li> <li>○ Style in Fiction               <ul style="list-style-type: none"> <li>○ Continued general analysis of style: speaker, audience, context, diction, details, allusions, syntax, repetition, tone</li> </ul> </li> <li>○ Tone in Fiction               <ul style="list-style-type: none"> <li>○ Analyzing tone: diction, imagery, theme, style</li> </ul> </li> <li>○ Irony in Fiction               <ul style="list-style-type: none"> <li>○ Verbal irony</li> <li>○ Dramatic irony</li> </ul> </li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
			<ul style="list-style-type: none"> <li>○ Situational irony</li> </ul> <p><b>Writing Project:</b> Reflective pieces and responses to literature, short pieces of analysis on individual elements of fiction, brief comparisons</p> <p><b>Writing Project:</b> Explain how one author uses various techniques (tone, style, etc.) to create an effect in the reader</p> <p>Students will read the following novels/novellas.</p> <p><u>Portrait of the Artist As a Young Man</u> – James Joyce</p> <p><u>Great Expectations</u> – Charles Dickens</p> <p><u>Wuthering Heights</u> – Emily Bronte</p> <p><u>Tales of the Jazz Age</u> and <u>The Great Gatsby</u> – F. Scott Fitzgerald</p> <p><b>Writing Project:</b> An essay reflecting on the impact of the novel on the time period it was written, the lasting impact of the novel, use of literary elements, structure, theme, and, where possible, comparison to other works is required of each novel.</p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>
<p><b>Unit Five: Non-Fiction and Prose</b> <b>Timeline: 6 weeks</b></p>			
CC 11-12 W 1a CC 11-12 W 1b CC 11-12 W 1c CC 11-12 W 1d CC 11-12 W 1e	Authors use a variety of means to persuade readers.  Sometimes the writer makes his meaning plain; often, however, a	How do the beliefs/behaviors of others affect your own beliefs/behaviors?  How does power corrupt people?	<p><b>A Collection of Essays – George Orwell</b> Several of the essays included deal with England's Empire and the form of government known as Imperialism. Even in essays where imperialism is not the primary focus, it is briefly discussed or indirectly referenced. In a written essay discuss Orwell's possible motivations and the success of his</p>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
CC 11-12 W 2a CC 11-12 W 2b CC 11-12 W 2c CC 11-12 W 2d CC 11-12 W 2e CC 11-12 W 2f CC 11-12 W 4 CC 11-12 W 5 CC 11-12 W 6 CC 11-12 W 7 CC 11-12 W 8 CC 11-12 W 9a CC 11-12 W9b CC 11-12 RI 1 CC 11-12 RI 2 CC 11-12 RI 3 CC 11-12 RI 5 CC 11-12 RI 7 CC11-12L5a CC11-12L5b	reader must go beyond the surface to find the meaning.	<p>How does blind ambition impact political behavior?</p> <p>What is the relationship between the reader and the writer? How can you know a writer's intended audience?</p>	<p>allusions to imperialism in the essays.</p> <p><b>On Liberty and other essays – John Stewart Mill</b>            Patrick Henry stated, “Give me liberty, or give me death!” Compare Stewart Mill and Henry. Include descriptions of their backgrounds, as well as their writings and speeches. Do you think the implications of the men on liberty were equal? Describe.</p> <p><b>Comparative Author Study</b></p> <p>Choose two of the following authors. Read several works from each and compare/contrast the lives, writings and impact of each author on his/her time period as well as modern society.</p> <p>Joseph Addison; Gloria Anzaldúa; Matthew Arnold; James Baldwin; James Boswell; Jesús Colón; Joan Didion; Frederick Douglass; W.E.B. Du Bois; Ralph Waldo Emerson; William Hazlitt; bell hooks; Samuel Johnson; Charles Lamb; Thomas Macaulay; Mary McCarthy; John Stuart Mill; George Orwell; Michael Pollan; Richard Rodriguez; Edward Said; Lewis Thomas; Henry David Thoreau; E.B. White; Virginia Woolf</p> <p>Additional Assessment:</p> <ul style="list-style-type: none"> <li>• Ongoing informal assessment through discussion and observation</li> <li>• Teacher made comprehension tests</li> <li>• Note taking and graphic organizers</li> <li>• Additional Text Analysis questions from the text.</li> </ul>

# Curriculum Framework for Integrated Mathematics 1

School: Newark Charter School

Curricular Tool: Integrated Mathematics 1 - Holt McDougall

Grade: 9

Standards Alignment	Big Ideas	Student Learning Targets	Assessments
<p><b>Unit One: Introduction To Integrated Mathematics</b>  <b>Timeline : 16 days</b></p>			
<p>Interpret expressions that represent a quantity in terms of its context.* <b>CC.9-12.A.SSE.1</b></p> <p>a. Interpret parts of an expression, such as terms, factors, and coefficients. <b>CC.9-12.A.SSE.1a</b></p> <p>Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. <b>CC.9-12.A.APR.1</b></p> <p>Create equations and inequalities in one variable and use them to solve problems. <i>Include equations arising from linear and quadratic functions, and simple rational and exponential functions.</i> <b>CC.9-12.A.CED.1</b></p> <p>Write a function that describes a relationship between two quantities.* <b>CC.9-12.F.BF.1</b></p> <p>a. Determine an explicit expression, a recursive process, or steps for calculation from a context. <b>CC.9-12.F.BF.1a</b></p> <p>Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself. <b>CC.9-12.G.CO.3</b></p> <p>Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures. <b>CC.9-12.G.SRT.5</b></p>	<p>Reading an expression with comprehension involves analysis of its underlying structure. This may suggest a different but equivalent way of writing the expression that exhibits some different aspect of its meaning.</p> <p>Viewing an expression as the result of operation on simpler expressions can sometimes clarify its underlying structure</p> <p>The concept of congruence and symmetry can be understood from the perspective of geometric transformation.</p>	<p>Make statements about information presented in tables, graphs, and concept maps</p> <p>Describe patterns using tables and variable expressions</p> <p>Evaluate variable expressions</p> <p>Using exponents to express repeated multiplication</p> <p>Evaluate powers of variables</p> <p>Make conjectures</p> <p>Use the order of operations to evaluate expressions</p> <p>Use the distributive property to simplify calculations, rewrite expressions, and combine like terms</p> <p>Create and identify congruent polygons</p> <p>Name corresponding parts of congruent polygons</p> <p>Build quadrilaterals from congruent triangles and write expressions for their perimeters</p> <p>Find lines of symmetry</p> <p>Communicate ideas through writing</p>	<p><b>Informal:</b>            Exercises &amp; Practice            Additional Examples            Quick Quizzes            Unit Checkpoint            Unit Review &amp; Assessment            Exit Tickets</p> <p><b>Formal Assessment:</b>            Working on Unit Project            Unit Project            Lesson Quiz            Unit Test</p>

Standards Alignment	Big Ideas	Student Learning Targets	Assessments
<b>Unit Two: Using Measures and Equations</b> <b>Timeline: 18 days</b>			
<p>Define appropriate quantities for the purpose of descriptive modeling. <b>CC.9-12.N.Q.2</b></p> <p>Use the structure of an expression to identify ways to rewrite it. <i>For example, see <math>x^4 - y^4</math> as <math>(x^2)^2 - (y^2)^2</math>, thus recognizing it as a difference of squares that can be factored as <math>(x^2 - y^2)(x^2 + y^2)</math>.</i> <b>CC.9-12.A.SSE.2</b></p> <p>Create equations and inequalities in one variable and use them to solve problems. <i>Include equations arising from linear and quadratic functions, and simple rational and exponential functions.</i> <b>CC.9-12.A.CED.1</b></p> <p>Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. <b>CC.9-12.A.REI.1</b></p> <p>Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. <b>CC.9-12.A.REI.3</b></p> <p>Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. <b>CC.9-12.G.CO.1</b></p> <p>Prove theorems about lines and angles. <i>Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.</i> <b>CC.9-12.G.CO.9</b></p> <p>Prove theorems about triangles. <i>Theorems include:</i></p>	<p>How unit and scale can be used as a tool to effectively model context and solve problems.</p> <p>Reading an expression with comprehension involves analysis of its underlying structure. This may suggest a different but equivalent way of writing the expression that exhibits some different aspect of its meaning.</p> <p>Once the triangle congruence criteria (ASA, SAS, and SSS) are established using rigid motions, they can be used to prove theorems about triangles, quadrilaterals, and other geometric figures</p>	<p>See different ways numbers are used</p> <p>Tell whether an estimate of a population or distance is reasonable or likely</p> <p>Review how to do operations with negative numbers</p> <p>Read and write numbers in scientific notation</p> <p>Recognize whether a result in scientific notation on a calculator is reasonable.</p> <p>Estimate lengths, distances on a map, and areas.</p> <p>Investigate and use the relationships among angles in circles, in triangles and formed by intersecting angles</p> <p>Simplify expression for measures of geometric figures by multiplying and combining like terms</p> <p>Begin to solve equations about geometric figures</p> <p>Use equations to solve a variety of real-life problems</p>	<p><b>Informal:</b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Tickets</p> <p><b>Formal Assessment:</b>  Working on Unit Project  Unit Project  Lesson Quiz  Unit Test</p>

Standards Alignment	Big Ideas	Student Learning Targets	Assessments
<p><i>measures of interior angles of a triangle sum to 180°; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.</i> <b>CC.9-12.G.CO.10</b></p>			
<p><b>Unit Three: Representing Data</b> <b>Timeline: 14 days</b></p>			
<p>(+) Use matrices to represent and manipulate data, e.g., to represent payoffs or incidence relationships in a network. <b>CC.9-12.N.VM.6</b></p> <p>Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. <b>CC.9-12.A.CED.2</b></p> <p>Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. <b>CC.9-12.A.REI.3</b></p> <p>Represent data with plots on the real number line (dot plots, histograms, and box plots). <b>CC.9-12.S.ID.1</b></p> <p>Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. <b>CC.9-12.S.ID.2</b></p> <p>Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). <b>CC.9-12.S.ID.3</b></p> <p>Evaluate reports based on data. <b>CC.9-12.S.IC.6</b></p>	<p>Data are gathered, displayed, summarized, examined, and interpreted to discover patterns and deviations from patterns.</p> <p>Which statistics to compare, which plots to use, and what the results of a comparison might mean, depend on the question to be investigated and the real-life actions to be taken.</p> <p>When making statistical models, technology is valuable for varying assumptions, exploring consequences and comparing predictions with data.</p>	<p>Use matrices and graphs to display and interpret data</p> <p>Find values that are typical of a data set</p> <p>Identify data values that are not typical of a data set</p> <p>Use equations to find missing data values</p> <p>Use inequalities to describe number line graphs</p> <p>Use histograms, frequency tables, and stem-and-leaf plots to display data</p> <p>Draw a box-and-whisker plot and use it to compare data sets</p> <p>Tell why a data display is a good choice for a data set</p> <p>Choose a good data display for a data set</p> <p>Recognize when graphs do not give an accurate picture of a data set</p>	<p><b>Informal:</b> Exercises &amp; Practice Additional Examples Quick Quizzes Unit Checkpoint Unit Review &amp; Assessment Exit Ticket</p> <p><b>Formal Assessment:</b> Working on Unit Project Unit Project Lesson Quiz Unit Test</p>
<p><b>Unit Four: Coordinates and Functions</b> <b>Timeline: 15 days</b></p>			
<p>Create equations and inequalities in one variable and use</p>	<p>Functions presented as expressions can model</p>	<p>Use coordinate systems to solve problems about locations in different settings</p>	<p><b>Informal:</b> Exercises &amp; Practice</p>

Standards Alignment	Big Ideas	Student Learning Targets	Assessments
<p>them to solve problems. <i>Include equations arising from linear and quadratic functions, and simple rational and exponential functions.</i> <b>CC.9-12.A.CED.1</b></p> <p>Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. <b>CC.9-12.A.CED.2</b></p> <p>For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. <i>Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.*</i> <b>CC.9-12.F.IF.4</b></p> <p>Write a function that describes a relationship between two quantities.* <b>CC.9-12.F.BF.1</b></p> <p>a. Determine an explicit expression, a recursive process, or steps for calculation from a context. <b>CC.9-12.F.BF.1a</b></p> <p>Distinguish between situations that can be modeled with linear functions and with exponential functions. <b>CC.9-12.F.LE.1</b></p> <p>a. Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. <b>CC.9-12.F.LE.1a</b></p> <p>b. Recognize situations in which one quantity changes at a constant rate per unit interval relative to another. <b>CC.9-12.F.LE.1b</b></p> <p>Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those</p>	<p>many important phenomena. Two important families of functions characterized by laws of growth are linear functions, which grow at a constant rate, and exponential functions, which grow at a constant percent rate</p> <p>Because we continually make theories about dependencies.</p> <p>The concept of congruence and symmetry can be understood from the perspective of geometric transformation.</p> <p>Once the triangle congruence criteria (ASA, SAS, and SSS) are established using rigid motions, they can be used to prove theorems about triangles, quadrilaterals, and other geometric figures</p> <p>Data are gathered, displayed, summarized, examined, and interpreted to discover patterns and deviations from patterns.</p>	<p>Learn about coordinate geometry</p> <p>Identify polygons on a coordinate plane</p> <p>Find the areas of polygons drawn on a coordinate plane</p> <p>Translate figures on a coordinate plane</p> <p>Recognize translational symmetry</p> <p>Recognize rotations of figures on a coordinate plane</p> <p>Rotate figures on polar graph paper</p> <p>Make and interpret scatter plot data</p> <p>Use scatter plots to make predictions</p> <p>Understand what a function is</p> <p>Identify control variables and independent variables</p> <p>Draw graph of functions</p> <p>Recognize functions</p> <p>Change from one representation of a function to another</p> <p>Learn about some basic functions</p>	<p>Additional Examples Quick Quizzes Unit Checkpoint Unit Review &amp; Assessment Exit Ticket</p> <p><b>Formal Assessment:</b> Working on Unit Project Unit Project Lesson Quiz Unit Test</p>

Standards Alignment	Big Ideas	Student Learning Targets	Assessments
<p>that do not (e.g., translation versus horizontal stretch). <b>CC.9-12.G.CO.2</b></p> <p>Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments. <b>CC.9-12.G.CO.4</b></p> <p>Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another. <b>CC.9-12.G.CO.5</b></p> <p>Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent. <b>CC.9-12.G.CO.6</b></p> <p>Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.* <b>CC.9-12.G.GPE.7</b></p> <p>Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. <b>CC.9-12.S.ID.6</b></p> <p>a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. <i>Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models.</i> <b>CC.9-12.S.ID.6a</b></p> <p>Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data. <b>CC.9-12.S.ID.7</b></p> <p>Compute (using technology) and interpret the correlation coefficient of a linear fit. <b>CC.9-12.S.ID.8</b></p>	<p>Which statistics to compare, which plots to use, and what the results of a comparison might mean, depend on the question to be investigated and the real-life actions to be taken</p>		

Standards Alignment	Big Ideas	Student Learning Targets	Assessments
<b>Unit Five: Equations for Problem Solving</b> <b>Timeline: 15 days</b>			
<p>Use the structure of an expression to identify ways to rewrite it. <i>For example, see <math>x^4 - y^4</math> as <math>(x^2)^2 - (y^2)^2</math>, thus recognizing it as a difference of squares that can be factored as <math>(x^2 - y^2)(x^2 + y^2)</math>.</i> <b>CC.9-12.A.SSE.2</b></p> <p>Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. <b>CC.9-12.A.APR.1</b></p> <p>Create equations and inequalities in one variable and use them to solve problems. <i>Include equations arising from linear and quadratic functions, and simple rational and exponential functions.</i> <b>CC.9-12.A.CED.1</b></p> <p>Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. <b>CC.9-12.A.CED.2</b></p> <p>Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. <b>CC.9-12.A.REI.1</b></p> <p>Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. <b>CC.9-12.A.REI.3</b></p> <p>Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. <b>CC.9-12.A.REI.5</b></p> <p>Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of</p>	<p>Reading an expression with comprehension involves analysis of its underlying structure. This may suggest a different but equivalent way of writing the expression that exhibits some different aspect of its meaning.</p> <p>An equation is a record of a computation with numbers, symbols that represent numbers, arithmetic operations, exponentiation, and, at more advanced levels, the operation of evaluating a function.</p> <p>Numeric relationships can be symbolically represented as equations and inequalities and fluency in transforming these symbolic representations is a tool for graphing and solving problems.</p> <p>Algebraic manipulations used to solve equations/systems are governed by the</p>	<p>Use a table, graph, or equation to model situations and solve problems.</p> <p>Simplify expressions and solve equations involving opposites, the distributive property and combining like terms</p> <p>Model situations and solve equations that have a variable on both sides of the equal sign</p> <p>Understand how adding, subtracting, multiplying and dividing affect an inequality</p> <p>Model situations with inequalities</p> <p>Learn to rewrite formulas to make them easier to use</p> <p>Use reciprocals to solve equations</p> <p>Use the formulas for the area of a parallelogram, a triangle, and a trapezoid to solve problem situations</p> <p>Model situations and solve equations with two variables using substitution</p>	<p><b>Informal:</b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Tickets</p> <p><b>Formal Assessment:</b>  Working on Unit Project  Unit Project  Lesson Quiz  Unit Test</p>

Standards Alignment	Big Ideas	Student Learning Targets	Assessments
<p>linear equations in two variables. <b>CC.9-12.A.REI.6</b></p> <p>For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. <i>Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.</i> * <b>CC.9-12.F.IF.4</b></p> <p>Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.* <b>CC.9-12.F.IF.7</b></p> <p>b. Graph linear and quadratic functions and show intercepts, maxima, and minima. <b>CC.9-12.F.IF.7a</b></p> <p>c. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions. <b>CC.9-12.F.IF.7b</b></p> <p>Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <i>For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.</i> <b>CC.9-12.F.IF.9</b></p> <p>Write a function that describes a relationship between two quantities.* <b>CC.9-12.F.BF.1</b></p> <p>a. Determine an explicit expression, a recursive process, or steps for calculation from a context. <b>CC.9-12.F.BF.1a</b></p> <p>Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).* <b>CC.9-12.G.MG.1</b></p>	<p>underlying properties and structure of number systems and the conventions of algebraic notation.</p> <p>Understand how the concept of function can be used to interpret, analyze and model functions that emerge from contexts including those contexts that are purely mathematical.</p>		

Standards Alignment	Big Ideas	Student Learning Targets	Assessments
<b>Unit Six: Ratios, Probability, and Similarity</b> <b>Timeline: 16 days</b>			
<p>Verify experimentally the properties of dilations given by a center and a scale factor: <b>CC.9-12.G.SRT.1</b></p> <p>a. A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged. <b>CC.9-12.G.SRT.1a</b></p> <p>b. The dilation of a line segment is longer or shorter in the ratio given by the scale factor. <b>CC.9-12.G.SRT.1b</b></p> <p>Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides. <b>CC.9-12.G.SRT.2</b></p> <p>Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles. <b>CC.9-12.G.SRT.6</b></p> <p>Explain and use the relationship between the sine and cosine of complementary angles. <b>CC.9-12.G.SRT.7</b></p> <p>Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.* <b>CC.9-12.G.SRT.8</b></p> <p>Understand statistics as a process for making inferences about population parameters based on a random sample from that population. <b>CC.9-12.S.IC.1</b></p> <p>Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each. <b>CC.9-12.S.IC.</b></p>	<p>The concept of congruence and symmetry can be understood from the perspective of geometric transformation.</p> <p>Once the triangle congruence criteria (ASA, SAS, and SSS) are established using rigid motions, they can be used to prove theorems about triangles, quadrilaterals, and other geometric figures</p> <p>Construction is another way to visualize and create a strategic pathway to proof.</p>	<p>Write ratios in simplest form</p> <p>Solve problems involving ratios</p> <p>Compare unit rates</p> <p>Describe how likely it is that something will happen</p> <p>Solve proportions</p> <p>Use sampling to make predictions</p> <p>Apply proportions to problems using similar figures and scale drawings</p> <p>Change the size of a figure without changing the shape</p> <p>Use two special right triangle ratios to solve problems.</p>	<p><b>Informal:</b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Tickets</p> <p><b>Formal Assessment:</b>  Working on Unit Project  Unit Project  Lesson Quiz  Unit Test</p>

Standards Alignment	Big Ideas	Student Learning Targets	Assessments
<b>Unit Seven: Direct Variation</b> <b>Timeline: 16 days</b>			
<p>Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. <b>CC.9-12.A.CED.2</b></p> <p>Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. <b>CC.9-12.G.CO.1</b></p> <p>Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles. <b>CC.9-12.G.SRT.6</b></p> <p>Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.* <b>CC.9-12.G.SRT.8</b></p> <p>Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector. <b>CC.9-12.G.C.5</b></p> <p>Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. <i>Use dissection arguments, Cavalieri's principle, and informal limit arguments.</i> <b>CC.9-12.G.GMD.1</b></p>	<p>The concept of congruence and symmetry can be understood from the perspective of geometric transformation.</p> <p>Once the triangle congruence criteria (ASA, SAS, and SSS) are established using rigid motions, they can be used to prove theorems about triangles, quadrilaterals, and other geometric figures</p> <p>Construction is another way to visualize and create a strategic pathway to proof.</p> <p>Similarity transformations (rigid motions followed by dilations) define similarity in the same way that rigid motions define congruence, thereby formalizing the similarity ideas of "same shape" and "scale factor" developed in the middle grades.</p> <p>These transformations lead to the criterion for triangle similarity that two pairs of</p>	<p>Explore three relationships that involve constant ratios</p> <p>Model a direct variation situation and use the model to make predictions</p> <p>Find the slope of a line in the coordinate plane</p> <p>Find the circumference and the length of an arc of a circle</p> <p>Recognize general characteristics of direct variation equations and graphs.</p> <p>Understand negative slopes</p> <p>Use dimensional analysis to work with the units in rates and conversion factors</p> <p>Use the formula for an area of a circle</p> <p>Find the area of a sector</p>	<p><b>Informal:</b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Tickets</p> <p><b>Formal Assessment:</b>  Working on Unit Project  Unit Project  Lesson Quiz  Unit Test</p>

Standards Alignment	Big Ideas	Student Learning Targets	Assessments
	<p>corresponding angles are congruent.</p> <p>The definition of trigonometric ratios is not only useful in solving right triangle problems but can also be applied to general triangles.</p> <p>Perimeter, area, and volume of geometric shapes can be described by equations, making algebraic manipulation into a tool for geometric understanding, modeling, and proof.</p>		
<p><b>Unit Eight: Linear Equations as Models</b>  <b>Timeline: 16 days</b></p>			
<p>Create equations and inequalities in one variable and use them to solve problems. <i>Include equations arising from linear and quadratic functions, and simple rational and exponential functions.</i> <b>CC.9-12.A.CED.1</b></p> <p>Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. <b>CC.9-12.A.CED.2</b></p> <p>Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). <b>CC.9-12.A.REI.10</b></p>	<p>An equation is a record of a computation with numbers, symbols that represent numbers, arithmetic operations, exponentiation, and, at more advanced levels, the operation of evaluating a function.</p> <p>Numeric relationships can be symbolically represented as equations and inequalities and</p>	<p>Recognize and how the rate and initial value in a real-life situation appear in an equation and a graph representing the situation</p> <p>Use the standard equation for a line to model real-life situations</p> <p>Change standard form to slope-intercept form</p> <p>Describe slopes of horizontal and vertical lines</p> <p>Write equations for horizontal and vertical lines</p>	<p><b><u>Informal:</u></b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Tickets</p> <p><b><u>Formal Assessment:</u></b>  Working on Unit Project  Unit Project  Lesson Quiz  Unit Test</p>

Standards Alignment	Big Ideas	Student Learning Targets	Assessments
<p>Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. <b>CC.9-12.A.REI.6</b></p> <p>Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <i>For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.</i> <b>CC.9-12.F.IF.9</b></p>	<p>fluency in transforming these symbolic representations is a tool for graphing and solving problems.</p> <p>Algebraic manipulations used to solve equations/systems are governed by the underlying properties and structure of number systems and the conventions of algebraic notation.</p>	<p>Use two points or the slope and one point to write an equation for a line</p> <p>Use an equation for a line to solve problems</p> <p>Find the point where two lines intersect</p> <p>Graph linear inequalities on a coordinate plane</p> <p>Solve problems by writing and graphing systems of inequalities</p>	
<p><b>Unit Nine: Reasoning and Measurement</b>  <b>Timeline: 19 days</b></p>			
<p>Rewrite expressions involving radicals and rational exponents using the properties of exponents. <b>CC.9-12.N.RN.2</b></p> <p>Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. <i>Use dissection arguments, Cavalieri's principle, and informal limit arguments.</i> <b>CC.9-12.G.GMD.1</b></p> <p>Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).* <b>CC.9-12.G.MG.1</b></p>	<p>Real-world situations are not organized and labeled for analysis; formulating flexible geometric models, representing such models, and analyzing them is a creative process.</p> <p>Perimeter, Area, and Volume of Geometric shapes can be described by equations, making algebraic manipulation into a tool for geometric understanding, modeling, and proof.</p>	<p>Investigate and use the relationship among the lengths of the sides of a right triangle</p> <p>Recognize different kinds of reasoning</p> <p>Simplify and multiply square roots</p> <p>Solve equations like <math>2x^2 = 36</math></p> <p>Write if-then statements and their converses and determine whether they are true or false</p> <p>Use lengths and areas to determine theoretical geometric probabilities</p> <p>Find the surface areas of prisms, cylinders, and pyramids</p> <p>Find the volume of prisms and cylinders</p> <p>Find the volume of pyramids and cones</p> <p>Use ratios of corresponding lengths, areas,</p>	<p><b>Informal:</b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Ticket</p> <p><b>Formal Assessment:</b>  Working on Unit Project  Unit Project  Lesson Quiz  Unit Test</p>

Standards Alignment	Big Ideas	Student Learning Targets	Assessments
		and volumes in similar figures.	
<b>Unit Ten: Quadratic Equations as Models</b> <b>Timeline: 19 days</b>			
<p>Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.* <b>CC.9-12.A.SSE.3</b></p> <p>a. Factor a quadratic expression to reveal the zeros of the function it defines. <b>CC.9-12.A.SSE.3a</b></p> <p>Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. <b>CC.9-12.A.APR.1</b></p> <p>Solve quadratic equations in one variable. <b>CC.9-12.A.REI.4</b></p> <p>a. Use the method of completing the square to transform any quadratic equation in <math>x</math> into an equation of the form <math>(x - p)^2 = q</math> that has the same solutions. Derive the quadratic formula from this form. <b>CC.9-12.A.REI.4a</b></p> <p>b. Solve quadratic equations by inspection (e.g., for <math>x^2 = 49</math>), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as <math>a \pm bi</math> for real numbers <math>a</math> and <math>b</math>. <b>CC.9-12.A.REI.4b</b></p> <p>Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. <b>CC.9-12.A.REI.6</b></p> <p>Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.* <b>CC.9-12.F.IF.7</b></p>	<p>Algebraic manipulations used to solve equations/systems are governed by the underlying properties and structure of number systems and the conventions of algebraic notation.</p> <p>How to extend and apply the conceptual understanding of arithmetic structures and operation to polynomials.</p> <p>Algebraic manipulations are governed by the properties of operations and exponents, and the conventions of algebraic notation.</p> <p>Understand how the concept of function can be used to interpret, analyze and model functions that emerge from contexts including those contexts that are purely mathematical.</p>	<p>Recognize and draw the mirror image of an object</p> <p>Translate and reflect the graph <math>y = x^2</math></p> <p>Use a table of values to sketch a parabola</p> <p>Use algebra to find the coordinates of the points where a parabola crosses the axis.</p> <p>Use a shortcut for simplifying powers</p> <p>Factor and expand algebraic expressions</p> <p>Use factoring to find the <math>x</math>-intercepts of parabolas</p> <p>Multiply two binomials</p> <p>Use a formula to find the line of symmetry of a parabola</p> <p>Factor trinomials</p> <p>Sketch the graph of a parabola</p> <p>Solve problems about situations modeled by parabolas</p>	<p><b>Informal:</b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Tickets</p> <p><b>Formal Assessment:</b>  Working on Unit Project  Unit Project  Lesson Quiz  Unit Test</p>

Standards Alignment	Big Ideas	Student Learning Targets	Assessments
<p>c. Graph linear and quadratic functions and show intercepts, maxima, and minima. <b>CC.9-12.F.IF.7a</b></p> <p>d. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions. <b>CC.9-12.F.IF.7b</b></p> <p>Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. <b>CC.9-12.F.IF.8</b></p> <p>a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. <b>CC.9-12.F.IF.8a</b></p>			

# Curriculum Framework for Mathematics

School: Newark Charter School

Curricular Tool: Integrated Mathematics 2 - Holt McDougal

Grade or Course: 10

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<b>Unit One: Sampling and Reasoning</b> <b>Timeline : 14 days</b>			
<p>Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays. <b>CC.9-12. N-Q.1</b></p> <p>Define appropriate quantities for the purpose of descriptive modeling. <b>CC.9-12. N-Q.2.</b></p> <p>Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <b>CC.9-12. N-Q.3.</b></p> <p>Represent data with plots on the real number line (dot plots, histograms, and box plots). <b>CC.9-12. S-ID.1.</b></p> <p>Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). <b>CC.9-12. S-ID.3.</b></p> <p>Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data. <b>CC.9-12. S-ID.5.</b></p> <p>Understand statistics as a process for making inferences about population parameters based on a random sample from that population. <b>CC.9-12. S-IC.1.</b></p> <p>Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. <i>For example, a model says a spinning coin falls heads up with probability 0.5. Would a result of 5 tails in a row cause you to question the model?</i> <b>CC.9-12. S-IC.2.</b></p>	<p>How unit and scale can be used as a tool to effectively model context and solve problems.</p> <p>Data are gathered, displayed, summarized, examined, and interpreted to discover patterns and deviations from patterns.</p> <p>Which statistics to compare, which plots to use, and what the results of a comparison might mean, depend on the question to be investigated and the real-life actions to be taken.</p> <p>When making statistical models, technology is valuable for varying assumptions, exploring consequences and comparing predictions with data.</p> <p>Causation implies correlation yet correlation does not imply causation.</p> <p>The conditions under which data are collected are important in drawing conclusions from the data; in critically reviewing uses of statistics in public media and other reports, it is important to consider the study design, how the data were gathered, and the analyses employed as well as the</p>	<p>Know how a survey of part of a population can be used to predict results for the entire population.</p> <p>Use an experiment to simulate the results of a survey</p> <p>Learn about different ways to select a sample</p> <p>Learn to raise questions about surveys</p> <p>Apply inductive reasoning to many situations.</p> <p>Learn that inductive reasoning does not always lead to a good conclusion</p> <p>Write if-then statements in other ways and draw simple conclusions from them</p> <p>Learn the difference between inductive and deductive reasoning</p> <p>Apply deductive reasoning to many situations</p> <p>Recognize errors in mathematical and logical reasoning</p>	<p><b>Informal:</b>            Exercises &amp; Practice            Additional Examples            Quick Quizzes            Unit Checkpoint            Unit Review &amp; Assessment            Exit Tickets</p> <p><b>Formal Assessment:</b>            Working on Unit Project            Unit Project            Lesson Quiz            Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each. <b>CC.9-12. S-IC.3.</b></p> <p>Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling. <b>CC.9-12. S-IC.4.</b></p> <p>Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant. <b>CC.9-12. S-IC.5.</b></p> <p>Evaluate reports based on data. <b>CC.9-12. S-IC.6.</b></p> <p>(+) Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions. <b>CC.9-12. S-MD.1.</b></p> <p>(+) Calculate the expected value of a random variable; interpret it as the mean of the probability distribution. <b>CC.9-12. S-MD.2.</b></p> <p>(+) Develop a probability distribution for a random variable defined for a sample space in which theoretical probabilities can be calculated; find the expected value. <b>CC.9-12. S-MD.3.</b></p> <p><i>For example, find the theoretical probability distribution for the number of correct answers obtained by guessing on all five questions of a multiple-choice test where each question has four choices, and find the expected grade under various grading schemes.</i></p> <p>(+) Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value. <b>CC.9-12.S-MD.4.</b> <i>For example, find a current data distribution on the number of TV sets per household in the United States, and calculate the expected number of sets per household. How many TV sets would you expect to find in 100 randomly selected households?</i></p> <p>(+) Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values.</p> <p>a. Find the expected payoff for a game of chance. <b>CC.9-12.S-MD.5.</b> <i>For example, find the expected winnings from a state lottery ticket or a game at a fast-food restaurant.</i></p>	<p>data summaries and the conclusions drawn.</p> <p>Collecting data from a random sample of a population makes it possible to draw valid conclusions about the whole population, taking variability into account.</p> <p>Randomly assigning individuals to different treatments allows a fair comparison of the effectiveness of those treatments.</p>		

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>b. Evaluate and compare strategies on the basis of expected values. <i>For example, compare a high-deductible versus a low-deductible automobile insurance policy using various, but reasonable, chances of having a minor or a major accident.</i></p> <p>(+) Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator). <b>CC.9-12. S-MD.6.</b></p> <p>(+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game). <b>CC.9-12. S-MD.7.</b></p>			
<p><b>Unit Two: Models of Variation and Growth</b>  <b>Timeline: 18 days</b></p>			
<p>Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. <b>CC.9-12. N-RN.1.</b> <i>For example, we define <math>5^{1/3}</math> to be the cube root of 5 because we want <math>(5^{1/3})^3 = 5^{(1/3)3}</math> to hold, so <math>(5^{1/3})^3</math> must equal 5.</i></p> <p>Rewrite expressions involving radicals and rational exponents using the properties of exponents. <b>CC.9-12. N-RN.2.</b></p> <p>Create equations and inequalities in one variable and use them to solve problems. <b>CC.9-12. A-CED.1.</b> <i>Include equations arising from linear and quadratic functions, and simple rational and exponential functions.</i></p> <p>Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. <b>CC.9-12. A-CED.2.</b></p> <p>Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. <b>CC.9-12. A-REI.3.</b></p> <p>Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). <b>CC.9-12. A-REI.10.</b></p>	<p>How properties of rational exponents, rational number, and irrational number are defined using characteristic patterns of equivalency and computation, to build a comprehensive knowledge of the structure and order of the real number system.</p> <p>An equation is a record of a computation with numbers, symbols that represent numbers, arithmetic operations, exponentiation, and, at more advanced levels, the operation of evaluating a function.</p> <p>Numeric relationships can be symbolically represented as equations and inequalities and fluency in transforming these symbolic representations is a tool for graphing and solving problems.</p> <p>Because we continually make theories about dependencies</p>	<p>Describe the graphs of functions</p> <p>Review linear functions, slope of a line, and direct variation</p> <p>Explore situations that involve constant products</p> <p>Find the surface area and volume of spheres</p> <p>Use the fact that all spheres are similar</p> <p>Model and apply relationships in which one quantity is proportional to the square or the cube of another quantity</p> <p>Use negative, zero, and fractional exponents</p> <p>Explore situations in which quantities repeatedly double or split in half</p>	<p><b>Informal:</b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Tickets</p> <p><b>Formal Assessment:</b>  Working on Unit Project  Unit Project  Lesson Quiz  Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. <b>CC.9-12. F-IF.4.</b> <i>Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.*</i></p> <p>Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. <b>CC.9-12. F-IF.6.</b></p> <p>Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. <b>*</b></p> <p>a. Graph linear and quadratic functions and show intercepts, maxima, and minima.</p> <p>b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions. <b>CC.9-12. F-IF.7.</b></p> <p>Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.</p> <p>b. Use the properties of exponents to interpret expressions for exponential functions. For example, identify percent rate of change in functions such as <math>y = (1.02)^t</math>, <math>y = (0.97)^t</math>, <math>y = (1.01)^{12t}</math>, <math>y = (1.2)^{t/10}</math>, and classify them as representing exponential growth or decay. <b>CC.9-12. F-IF.8.</b></p> <p>Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <b>CC.9-12. F-IF.9.</b> <i>For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.</i></p> <p>Write a function that describes a relationship between two quantities. <b>CC.9-12. F-BF.1.</b></p> <p>Determine an explicit expression, a recursive process, or steps for calculation from a context.</p>	<p>between quantities in nature and society, functions are important tools in the construction of mathematical models.</p> <p>Functions presented as expressions can model many important phenomena. Two important families of functions characterized by laws of growth are linear functions, which grow at a constant rate, and exponential functions, which grow at a constant percent rate.</p>		

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>Combine standard function types using arithmetic operations. <i>For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.</i></p> <p>(+) Compose functions. <i>For example, if <math>T(y)</math> is the temperature in the atmosphere as a function of height, and <math>h(t)</math> is the height of a weather balloon as a function of time, then <math>T(h(t))</math> is the temperature at the location of the weather balloon as a function of time.</i></p> <p>Find inverse functions. Solve an equation of the form <math>f(x) = c</math> for a simple function <math>f</math> that has an inverse and write an expression for the inverse. <b>CC.9-12. F-BF.4.</b> <i>For example, <math>f(x) = 2x^3</math> or <math>f(x) = (x+1)/(x-1)</math> for <math>x \neq 1</math>.</i></p> <p>Distinguish between situations that can be modeled with linear functions and with exponential functions. <b>CC.9-12. F-LE.1.</b></p> <p>Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals.</p> <p>Recognize situations in which one quantity changes at a constant rate per unit interval relative to another.</p> <p>Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.</p> <p>Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table). <b>CC.9-12. F-LE.2.</b></p> <p>Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function. <b>CC.9-12. F-LE.3.</b></p> <p>Interpret the parameters in a linear or exponential function in terms of a context. <b>CC.9-12. F-LE.5.</b></p> <p>Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. <i>Use dissection arguments, Cavalieri's principle, and informal limit arguments.</i> <b>CC.9-12. G-GMD.1.</b></p>			

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data. <b>CC.9-12. S-ID.7.</b>			
<b>Unit Three: Linear Systems and Matrices</b> <b>Timeline: 18 days</b>			
<p>(+) Use matrices to represent and manipulate data, e.g., to represent payoffs or incidence relationships in a network. <b>CC.9-12. N-VM.6.</b></p> <p>(+) Multiply matrices by scalars to produce new matrices, e.g., as when all of the payoffs in a game are doubled. <b>CC.9-12. N-VM.7.</b></p> <p>(+) Add, subtract, and multiply matrices of appropriate dimensions. <b>CC.9-12. N-VM.8.</b></p> <p>(+) Understand that, unlike multiplication of numbers, matrix multiplication for square matrices is not a commutative operation, but still satisfies the associative and distributive properties. <b>CC.9-12. N-VM.9.</b></p> <p>(+) Understand that the zero and identity matrices play a role in matrix addition and multiplication similar to the role of 0 and 1 in the real numbers. The determinant of a square matrix is nonzero if and only if the matrix has a multiplicative inverse. <b>CC.9-12. N-VM.10.</b></p> <p>(+) Work with <math>2 \times 2</math> matrices as a transformations of the plane, and interpret the absolute value of the determinant in terms of area. <b>CC.9-12. N-VM.12.</b></p> <p>Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. <b>CC.9-12. A-REI.5.</b></p> <p>Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. <b>CC.9-12. A-REI.6.</b></p> <p>Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. For example, find the points of intersection between the line <math>y = -3x</math> and the circle <math>x^2 + y^2 = 3</math>. <b>CC.9-12. A-REI.7.</b></p>	<p>Using vectors and matrices to illustrate the effects of transformations of objects. Algebraic manipulations used to solve equations/systems are governed by the underlying properties and structure of number systems and the conventions of algebraic notation.</p>	<p>Solve systems of linear equations by graphing</p> <p>Graph systems of linear inequalities</p> <p>Solve systems of equations by substitution</p> <p>Understand and use the relationships between the slopes of parallel and perpendicular lines.</p> <p>Solving systems of equations using addition or subtraction and choose a method for solving a system of equations</p> <p>Use matrices to represent data sets and use matrix operations</p> <p>Use matrices to represent changes in the size or position of a polygon</p> <p>Recognize when matrices can be multiplied and find the product of two matrices</p> <p>Use technology to find inverse matrices</p> <p>Use inverse matrices to solve systems of equations</p>	<p><b>Informal:</b></p> <p>Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Tickets</p> <p><b>Formal Assessment:</b></p> <p>Working on Unit Project  Unit Project  Lesson Quiz  Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>(+) Represent a system of linear equations as a single matrix equation in a vector variable. <b>CC.9-12. A-REI.8.</b></p> <p>(+) Find the inverse of a matrix if it exists and use it to solve systems of linear equations (using technology for matrices of dimension <math>3 \times 3</math> or greater). <b>CC.9-12. A-REI.9.</b></p> <p>Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch). <b>CC.9-12. G-CO.2.</b></p> <p>Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another. <b>CC.9-12. G-CO.5.</b></p>			
<p><b>Unit Four: Quadratic Function and Graphs</b>  <b>Timeline: 16 days</b></p>			
<p>Know there is a complex number <math>i</math> such that <math>i^2 = -1</math>, and every complex number has the form <math>a + bi</math> with <math>a</math> and <math>b</math> real. <b>CC.9-12. N-CN.1.</b></p> <p>Use the relation <math>i^2 = -1</math> and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers. <b>CC.9-12. N-CN.2.</b></p> <p>Solve quadratic equations with real coefficients that have complex solutions. <b>CC.9-12. N-CN.7.</b></p> <p>(+) Extend polynomial identities to the complex numbers. <i>For example, rewrite <math>x^2 + 4</math> as <math>(x + 2i)(x - 2i)</math>.</i> <b>CC.9-12. N-CN.8.</b></p> <p>Interpret expressions that represent a quantity in terms of its context. <b>CC.9-12. A-SSE.1.</b></p> <p>Interpret parts of an expression, such as terms, factors, and coefficients.</p>	<p>How knowledge of number properties in the Real Number System can be use to develop and apply properties of the Complex Number System.</p> <p>Reading an expression with comprehension involves analysis of its underlying structure. This may suggest a different but equivalent way of writing the expression that exhibits some different aspect of its meaning.</p> <p>Viewing an expression as the result of operation on simpler expressions can sometimes</p>	<p>Understand how the coefficients of a quadratic equation influence its graph: the direction it opens, its vertex, its line of symmetry and the y-intercept</p> <p>Explore translations of parabolas</p> <p>Solve simple quadratic equations by graphing and undoing</p> <p>Solve quadratic equations by factoring</p> <p>Use the quadratic formula to solve quadratic equations</p> <p>Use the discriminant to find</p>	<p><b>Informal:</b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Tickets</p> <p><b>Formal Assessment:</b>  Working on Unit Project  Unit Project  Lesson Quiz  Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>Interpret complicated expressions by viewing one or more of their parts as a single entity. <i>For example, interpret <math>P(1+r)^n</math> as the product of <math>P</math> and a factor not depending on <math>P</math>.</i> Use the structure of an expression to identify ways to rewrite it. <i>For example, see <math>x^4 - y^4</math> as <math>(x^2)^2 - (y^2)^2</math>, thus recognizing it as a difference of squares that can be factored as <math>(x^2 - y^2)(x^2 + y^2)</math>.</i> <b>A-CC.9-12.SSE.2.</b></p> <p>Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. <b>★ CC.9-12.A-SSE.3.</b></p> <p>a. Factor a quadratic expression to reveal the zeros of the function it defines.</p> <p>b. Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines.</p> <p>Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. <b>CC.9-12.A-APR.1.</b></p> <p>Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial. <b>CC.9-12.A-APR.3.</b></p> <p>Create equations and inequalities in one variable and use them to solve problems. <i>Include equations arising from linear and quadratic functions, and simple rational and exponential functions.</i> <b>CC.9-12.A-CED.1.</b></p> <p>Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. <b>CC.9-12.A-CED.2.</b></p> <p>Solve quadratic equations in one variable.</p> <p>a. Use the method of completing the square to transform any quadratic equation in <math>x</math> into an equation of the form <math>(x - p)^2 = q</math> that has the same solutions. Derive the quadratic formula from this form.</p> <p>b. Solve quadratic equations by inspection (e.g., for <math>x^2 = 49</math>), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize</p>	<p>clarify its underlying structure.</p> <p>How to extend and apply the conceptual understanding of arithmetic structures and operation to polynomials.</p> <p>Algebraic manipulations are governed by the properties of operations and exponents, and the conventions of algebraic notation.</p> <p>Algebraic manipulations used to solve equations/systems are governed by the underlying properties and structure of number systems and the conventions of algebraic notation.</p> <p>Understand how the concept of function can be used to interpret, analyze and model functions that emerge from contexts including those contexts that are purely mathematical.</p>	<p>the number of real solutions of a quadratic equation</p> <p>Solve problems involving quadratic systems</p>	

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>when the quadratic formula gives complex solutions and write them as <math>a \pm bi</math> for real numbers <math>a</math> and <math>b</math>. <b>CC.9-12. A-REI.4.</b></p> <p>Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. For example, find the points of intersection between the line <math>y = -3x</math> and the circle <math>x^2 + y^2 = 3</math>. <b>CC.9-12. A-REI.7.</b></p> <p>For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. <i>Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.</i> <b>CC.9-12. F-IF.4.</b></p> <p>Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. <b>CC.9-12. F-IF.7.</b></p> <p>a. Graph linear and quadratic functions and show intercepts, maxima, and minima. Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. <b>CC.9-12. F-IF.8.</b></p> <p>a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <b>CC.9-12. F-IF.9.</b> <i>For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.</i></p>			
<p><b>Unit Five: Coordinate Geometry and Quadrilaterals</b> <b>Timeline: 14 days</b></p>			
<p>Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. <b>CC.9-12.</b></p>	<p>The concept of congruence and symmetry can be understood from the perspective of</p>	<p>Describe the characteristics of quadrilaterals and develop classification skills</p>	<p><b>Informal:</b> Exercises &amp; Practice Additional Examples</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p><b>G.CO.1.</b></p> <p>Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch). <b>CC.9-12. G-CO.2.</b></p> <p>Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself. <b>CC.9-12. G-CO.3.</b></p> <p>Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments. <b>CC.9-12. G-CO.4.</b></p> <p>Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another. <b>CC.9-12. G-CO.5.</b></p> <p>Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent. <b>CC.9-12. G-CO.6.</b></p> <p>Prove theorems about parallelograms. <i>Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.</i> <b>CC.9-12. G-CO.11.</b></p> <p>Verify experimentally the properties of dilations given by a center and a scale factor: <b>CC.9-12. G-SRT.1.</b></p> <p>A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged.</p>	<p>geometric transformation.</p> <p>Once the triangle congruence criteria (ASA, SAS, and SSS) are established using rigid motions, they can be used to prove theorems about triangles, quadrilaterals, and other geometric figures</p> <p>Construction is another way to visualize and create a strategic pathway to proof.</p>	<p>Use the formulas for the distance and slope between two points to show relationships in quadrilaterals.</p> <p>Use the formula to find the midpoint of a segment</p> <p>Transform geometric figures and learn how transformations affect their properties</p> <p>Represent figures on a coordinate plane using as few variables coordinates as possible</p> <p>Use coordinate geometry and deductive reasoning to verify some properties of polygons.</p>	<p>Quick Quizzes Unit Checkpoint Unit Review &amp; Assessment Exit Tickets</p> <p><b>Formal Assessment:</b> Working on Unit Project Unit Project Lesson Quiz Unit Test</p>
<p><b>Unit Six: Counting Strategies, Probabilities, Binomials</b> <b>Timeline: 18 days</b></p>			
<p>Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. <b>CC.9-12. S-IC.2.</b> <i>For example, a model says a spinning coin falls heads up with probability</i></p>	<p>In a probability model, sample points represent outcomes and combine to make up events.</p>	<p>Use diagrams and tables to count possibilities</p> <p>Use the multiplication</p>	<p><b>Informal:</b> Exercises &amp; Practice Additional Examples</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p><i>0.5. Would a result of 5 tails in a row cause you to question the model?</i></p> <p>Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events (“or,” “and,” “not”). <b>CC.9-12. S-CP.1.</b></p> <p>Understand that two events <math>A</math> and <math>B</math> are independent if the probability of <math>A</math> and <math>B</math> occurring together is the product of their probabilities, and use this characterization to determine if they are independent. <b>CC.9-12. S-CP.2.</b></p> <p>Understand the conditional probability of <math>A</math> given <math>B</math> as <math>P(A \text{ and } B)/P(B)</math>, and interpret independence of <math>A</math> and <math>B</math> as saying that the conditional probability of <math>A</math> given <math>B</math> is the same as the probability of <math>A</math>, and the conditional probability of <math>B</math> given <math>A</math> is the same as the probability of <math>B</math>. <b>CC.9-12. S-CP.3.</b></p> <p>Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. <b>CC.9-12. S-CP.4.</b> <i>For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results.</i></p> <p>Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. <b>CC.9-12. S-CP.5.</b> <i>For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer.</i></p> <p>Find the conditional probability of <math>A</math> given <math>B</math> as the fraction of <math>B</math>'s outcomes that also belong to <math>A</math>, and interpret the answer in terms of the model. <b>CC.9-12. S-CP.6.</b></p> <p>Apply the Addition Rule, <math>P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)</math>, and interpret the answer in terms of the model. <b>CC.9-12. S-CP.7.</b></p>	<p>The probabilities of the events can be computed by applying the Addition and Multiplication Rules.</p> <p>Interpreting these probabilities relies on an understanding of independence and conditional probability, which can be approached through the analysis of two-way tables.</p>	<p>counting principle to find a number of possible arrangements of items</p> <p>Find the probability of an even and mutually exclusive events</p> <p>Find the probability of dependent and independent events</p> <p>Find the number of ways to select items from a group</p> <p>Find patterns in Pascal’s triangle</p> <p>Recognize the elements of Pascal’s triangle as combinations</p> <p>Find probabilities for experiments that have two outcomes for each trial and where the probability of each outcome is one half</p> <p>Find probabilities for binomial experiments where the probability of each outcome is not one half</p> <p>Find powers of binomials</p>	<p>Quick Quizzes Unit Checkpoint Unit Review &amp; Assessment Exit Tickets</p> <p><b>Formal Assessment:</b> Working on Unit Project Unit Project Lesson Quiz Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>(+) Apply the general Multiplication Rule in a uniform probability model, <math>P(A \text{ and } B) = P(A)P(B A) = P(B)P(A B)</math>, and interpret the answer in terms of the model. <b>CC.9-12. S-CP.8.</b></p> <p>(+) Use permutations and combinations to compute probabilities of compound events and solve problems. <b>CC.9-12. S-CP.9.</b></p> <p>(+) Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator). <b>CC.9-12. S-MD.6.</b></p> <p>(+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game). <b>CC.9-12. S-MD.7.</b></p>			
<p><b>Unit Seven: Logic and Proof</b>  <b>Timeline: 14 days</b></p>			
<p>Prove theorems about lines and angles. <i>Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.</i> <b>CC.9-12. G-CO.9.</b></p> <p>Prove theorems about parallelograms. <i>Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.</i> <b>CC.9-12. G-CO.11.</b></p> <p>Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events ("or," "and," "not"). <b>CC.9-12. S-CP.1.</b></p>	<p>The concept of congruence and symmetry can be understood from the perspective of geometric transformation.</p> <p>Once the triangle congruence criteria (ASA, SAS, and SSS) are established using rigid motions, they can be used to prove theorems about triangles, quadrilaterals, and other geometric figures</p> <p>Construction is another way to visualize and create a strategic pathway to proof.</p>	<p>Learn the meaning of the words <i>and</i>, <i>or</i> and <i>not</i></p> <p>Graph algebraic sentences that use these words</p> <p>Translate among various forms of implications</p> <p>Distinguish valid arguments from invalid arguments</p> <p>Recognize and write biconditionals</p> <p>Use biconditionals to make valid arguments and to recognize and write good definitions.</p> <p>Become familiar with key elements of proof and formats for two-column, paragraph and flow proofs.</p> <p>Use postulates of algebra to write proofs</p>	<p><b>Informal:</b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Tickets</p> <p><b>Formal Assessment:</b>  Working on Unit Project  Unit Project  Lesson Quiz  Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
		<p>Recognize the value of definitions and postulates in proof</p> <p>Write proofs about angles</p> <p>Write proofs for properties of parallel lines.</p>	
<p><b>Unit Eight: Similar and Congruent Triangles</b>  <b>Timeline: 19 days</b></p>			
<p>(+) Use special triangles to determine geometrically the values of sine, cosine, tangent for <math>\square \pi/3, \square \pi/4</math> and <math>\square \pi/6</math>, and use the unit circle to express the values of sine, cosine, and tangent for <math>\square \pi-x, \square \pi+x</math>, and <math>2\pi-x</math> in terms of their values for <math>x</math>, where <math>x</math> is any real number. <b>CC.9-12. F.TF.3.</b></p> <p>Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions. <b>CC.9-12. G-CO.8.</b></p> <p>Prove theorems about triangles. <i>Theorems include: measures of interior angles of a triangle sum to <math>180^\circ</math>; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.</i> <b>CC.9-12. G-CO.10.</b></p> <p>Prove theorems about parallelograms. <i>Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.</i> <b>CC.9-12. G-CO.11.</b></p> <p>Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). <i>Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line.</i> <b>CC.9-12. G-CO.12.</b></p> <p>Construct an equilateral triangle, a square, and a regular hexagon</p>	<p>The concept of congruence and symmetry can be understood from the perspective of geometric transformation.</p> <p>Once the triangle congruence criteria (ASA, SAS, and SSS) are established using rigid motions, they can be used to prove theorems about triangles, quadrilaterals, and other geometric figures</p> <p>Construction is another way to visualize and create a strategic pathway to proof.</p> <p>Similarity transformations (rigid motions followed by dilations) define similarity in the same way that rigid motions define congruence, thereby formalizing the similarity ideas of "same shape" and "scale factor" developed in the middle grades.</p> <p>These transformations lead to the criterion for triangle similarity that two pairs of corresponding angles are congruent.</p>	<p>Apply converses of parallel line theorems in proofs</p> <p>Prove the triangle sum theorem and apply it to numerical problems and proofs of other theorems</p> <p>Apply the properties of similar triangles</p> <p>Prove that triangles are similar</p> <p>Use two angles and side in proofs about congruent triangles</p> <p>Use two sides and an angle or three sides in proofs about congruent triangles</p> <p>Apply properties of isosceles triangles, equilateral triangles and perpendicular bisectors</p> <p>Identify similar right triangles and apply right triangle theorems</p> <p>Find geometric means</p> <p>Discover properties of <math>45^\circ - 45^\circ - 90^\circ</math> and <math>30^\circ - 60^\circ - 90^\circ</math> triangles</p>	<p><b>Informal:</b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Tickets</p> <p><b>Formal Assessment:</b>  Working on Unit Project  Unit Project  Lesson Quiz  Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>inscribed in a circle. <b>CC.9-12. G-CO.13.</b></p> <p>Verify experimentally the properties of dilations given by a center and a scale factor: <b>CC.9-12. G-SRT.1.</b></p> <p>A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged. The dilation of a line segment is longer or shorter in the ratio given by the scale factor.</p> <p>Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides. <b>CC.9-12. G-SRT.2.</b></p> <p>Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar. <b>CC.9-12. G-SRT.3.</b></p> <p>Prove theorems about triangles. <i>Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity.</i> <b>CC.9-12. G-SRT.4.</b></p> <p>Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures. <b>CC.9-12. G-SRT.5.</b></p> <p>Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles. <b>CC.9-12. G-SRT.6.</b></p> <p>Explain and use the relationship between the sine and cosine of complementary angles. <b>CC.9-12. G-SRT.7.</b></p> <p>Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems. * <b>CC.9-12. G-SRT.8.</b></p>	<p>The definition of trigonometric ratios is not only useful in solving right triangle problems but can also be applied to general triangles.</p>	<p>Review the trigonometric ratios: sine, cosine, and tangent.</p>	
<p><b>Unit Nine: Polynomial and Rational Functions</b>  <b>Timeline: 15 days</b></p>			
<p>Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction,</p>	<p>How to extend and apply the conceptual understanding of</p>	<p>Model real-world situations with equations</p>	<p><b>Informal:</b> Exercises &amp; Practice</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>and multiplication; add, subtract, and multiply polynomials. <b>CC.9-12.A-APR.1.</b></p> <p>Rewrite simple rational expressions in different forms; write <math>\frac{a(x)}{b(x)}</math> in the form <math>q(x) + \frac{r(x)}{b(x)}</math>, where <math>a(x)</math>, <math>b(x)</math>, <math>q(x)</math>, and <math>r(x)</math> are polynomials with the degree of <math>r(x)</math> less than the degree of <math>b(x)</math>, using inspection, long division, or, for the more complicated examples, a computer algebra system. <b>CC.9-12.A-APR.6.</b></p> <p>.(+). Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions. <b>CC.9-12.A-APR.7</b></p> <p>Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise. <b>CC.9-12.A-REI.2.</b></p> <p>Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. <b>CC.9-12.A-REI.3.</b></p> <p>Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. <b>CC.9-12.F-IF.7.</b></p> <p>c. Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior.</p> <p>d. (+) Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior.</p> <p>e. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude.</p> <p>Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. <b>CC.9-12.F-IF.8.</b></p> <p>a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.</p> <p>b. Use the properties of exponents to interpret expressions for exponential functions. For example, identify percent rate of change in</p>	<p>arithmetic structures and operation to polynomials.</p> <p>Algebraic manipulations are governed by the properties of operations and exponents, and the conventions of algebraic notation.</p> <p>Understand how the concept of function can be used to interpret, analyze and model functions that emerge from contexts including those contexts that are purely mathematical.</p> <p>Functions presented as expressions can model many important phenomena. Two important families of functions characterized by laws of growth are linear functions, which grow at a constant rate, and exponential functions, which grow at a constant percent rate.</p>	<p>Classify expressions</p> <p>Use rules of exponents to simplify expressions</p> <p>Solve rational equations that simplify to linear or quadratic equations</p> <p>Analyze graphs of polynomial functions written in factored form</p> <p>Solve cubic equations by various methods</p> <p>Graph parametric equations to solve</p>	<p>Additional Examples</p> <p>Quick Quizzes</p> <p>Unit Checkpoint</p> <p>Unit Review &amp; Assessment</p> <p>Exit Tickets</p> <p><b>Formal Assessment:</b></p> <p>Working on Unit Project</p> <p>Unit Project</p> <p>Lesson Quiz</p> <p>Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>functions such as <math>y = (1.02)^t</math>, <math>y = (0.97)^t</math>, <math>y = (1.01)^{12t}</math>, <math>y = (1.2)^{t/10}</math>, and classify them as representing exponential growth or decay. Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function. <b>CC.9-12. F-LE.3.</b></p>			
<p><b>Unit Ten: Coordinates and Figures in Space</b>  <b>Timeline: 13 days</b></p>			
<p>Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation. <b>CC.9-12. G-GPE.1.</b></p> <p>Use coordinates to prove simple geometric theorems algebraically. <b>CC.9-12. G-GPE.4.</b> <i>For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point <math>(1, \sqrt{3})</math> lies on the circle centered at the origin and containing the point <math>(0, 2)</math>.</i></p> <p>Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula. * <b>CC.9-12. G-GPE.7.</b></p> <p>Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects. <b>CC.9-12. G-GMD.4.</b></p> <p>Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).* <b>CC.9-12.G.MG.1</b></p>	<p>Analytic geometry connects algebra and geometry, resulting in powerful methods of analysis and problem solving.</p> <p>Just as the number line associates numbers with locations in one dimension, a pair of perpendicular axes associates pairs of numbers with locations in two dimensions.</p> <p>This correspondence between numerical coordinates and geometric points allows methods from algebra to be applied to geometry and vice versa</p> <p>Geometric shapes can be described by equations, making algebraic manipulation into a tool for geometric understanding, modeling, and proof.</p> <p>Perimeter, Area, and Volume of Geometric shapes can be described by equations, making algebraic manipulation into a tool for geometric understanding, modeling, and proof.</p>	<p>Visualize space figures</p> <p>Describe space figures that are formed by rotating plane figures around a line</p> <p>Describe or draw a set of points that meet one or more conditions</p> <p>Describe the location of points in space using three coordinates</p> <p>Find midpoints of segments in three dimensions</p> <p>Find the distance between two points in three dimensions</p> <p>Graph a circle and find the equation of a circle or a sphere</p>	<p><b>Informal:</b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Tickets</p> <p><b>Formal Assessment:</b>  Working on Unit Project  Unit Project  Lesson Quiz  Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
	Geometric transformations of shape (composing, decomposing or slicing) correspond to algebraic changes in their equations.		

## Curriculum Framework for Integrated Mathematics 3

School: Newark Charter School

Curricular Tool: Integrated Mathematics 3 - Holt McDougall

Grade: 11

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<b>Unit One: Modeling Problem Situations</b> <b>Timeline : 17 days</b>			
<p>(+) Use matrices to represent and manipulate data, e.g., to represent payoffs or incidence relationships in a network. <b>CC.9-12.N.VM.6</b></p> <p>Create equations and inequalities in one variable and use them to solve problems. <i>Include equations arising from linear and quadratic functions, and simple rational and exponential functions.</i> <b>CC.9-12.A.CED.1</b></p> <p>Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. <b>CC.9-12.A.CED.2</b></p> <p>Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context. <i>For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.</i> <b>CC.9-12.A.CED.3</b></p> <p>Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. <b>CC.9-12.A.REI.3</b></p> <p>Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. <b>CC.9-12.A.REI.5</b></p> <p>Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. <b>CC.9-12.A.REI.6</b></p> <p>Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. <i>For example, find the points of intersection between the line <math>y = -3x</math> and the circle <math>x^2 + y^2 = 3</math>.</i> <b>CC.9-12.A.REI.7</b></p> <p>(+) Represent a system of linear equations as a single matrix equation in a vector variable. <b>CC.9-12.A.REI.8</b></p>	<p>Algebraic manipulations used to solve equations/systems are governed by the underlying properties and structure of number systems and the conventions of algebraic notation.</p> <p>An equation is a record of a computation with numbers, symbols that represent numbers, arithmetic operations, exponentiation, and, at more advanced levels, the operation of evaluating a function.</p> <p>Numeric relationships can be symbolically represented as equations and inequalities and fluency in transforming these symbolic representations is a tool for graphing and solving problems.</p> <p>Understand how the concept of function can be used to interpret, analyze and model functions that emerge from contexts including those contexts that are purely mathematical.</p> <p>Data are gathered, displayed, summarized, examined, and</p>	<p>Write, apply, and compare step-by-step procedures for solving problems</p> <p>Use organized lists to solve problems</p> <p>Use statistics and data displays to draw conclusions</p> <p>Use graphs and equations to model situations and make decisions</p> <p>Use systems of equations to solve problems</p> <p>Use diagrams to solve problems</p> <p>Make quantities as large or as small as possible to solve real-life problems</p> <p>Use systems of inequalities to model situations and find maximum and minimum values</p>	<p><b>Informal:</b>            Exercises &amp; Practice            Additional Examples            Quick Quizzes            Unit Checkpoint            Unit Review &amp; Assessment            Exit Tickets</p> <p><b>Formal Assessment:</b>            Working on Unit Project            Unit Project            Lesson Quiz            Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>(+) Find the inverse of a matrix if it exists and use it to solve systems of linear equations (using technology for matrices of dimension <math>3 \times 3</math> or greater). <b>CC.9-12.A.REI.9</b></p> <p>Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). <b>CC.9-12.A.REI.10</b></p> <p>Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes. <b>CC.9-12.A.REI.12</b></p> <p>For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. <i>Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.*</i> <b>CC.9-12.F.IF.4</b></p> <p>Represent data with plots on the real number line (dot plots, histograms, and box plots). <b>CC.9-12.S.ID.1</b></p> <p>Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. <b>CC.9-12.S.ID.2</b></p>	<p>interpreted to discover patterns and deviations from patterns.</p>		
<p><b>Unit Two: Exploring and Applying Functions</b>  <b>Timeline: 17 days</b></p>			
<p>Use the structure of an expression to identify ways to rewrite it. For example, see <math>x^4 - y^4</math> as <math>(x^2)^2 - (y^2)^2</math>, thus recognizing it as a difference of squares that can be factored as <math>(x^2 - y^2)(x^2 + y^2)</math>. <b>CC.9-12.A.SSE.2</b></p> <p>Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.* <b>CC.9-12.A.SSE.3</b></p> <ol style="list-style-type: none"> <li>Factor a quadratic expression to reveal the zeros of the function it defines. <b>CC.9-12.A.SSE.3a</b></li> <li>Complete the square in a quadratic expression to reveal the</li> </ol>	<p>How to extend and apply the conceptual understanding of arithmetic structures and operation to polynomials.</p> <p>Algebraic manipulations are governed by the properties of operations and exponents, and the conventions of algebraic notation.</p> <p>Reading an expression with</p>	<p>Recognize and describe functions</p> <p>Use linear functions to describe situations</p> <p>Find the domain and range of a linear function</p> <p>Use piecewise and absolute value functions to describe situations</p>	<p><b>Informal:</b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Tickets</p> <p><b>Formal Assessment:</b>  Working on Unit Project</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>maximum or minimum value of the function it defines. <b>CC.9-12.A.SSE.3b</b></p> <p>Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. <b>CC.9-12.A.APR.1</b></p> <p>Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial. <b>CC.9-12.A.APR.3</b></p> <p>Rewrite simple rational expressions in different forms; write <math>a(x)/b(x)</math> in the form <math>q(x) + r(x)/b(x)</math>, where <math>a(x)</math>, <math>b(x)</math>, <math>q(x)</math>, and <math>r(x)</math> are polynomials with the degree of <math>r(x)</math> less than the degree of <math>b(x)</math>, using inspection, long division, or, for the more complicated examples, a computer algebra system. <b>CC.9-12.A.APR.6</b></p> <p>(+) Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions. <b>CC.9-12.A.APR.7</b></p> <p>Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. <b>CC.9-12.A.REI.1</b></p> <p>Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise. <b>CC.9-12.A.REI.2</b></p> <p>Solve quadratic equations in one variable. <b>CC.9-12.A.REI.4</b></p> <ol style="list-style-type: none"> <li>Use the method of completing the square to transform any quadratic equation in <math>x</math> into an equation of the form <math>(x - p)^2 = q</math> that has the same solutions. Derive the quadratic formula from this form. <b>CC.9-12.A.REI.4a</b></li> <li>Solve quadratic equations by inspection (e.g., for <math>x^2 = 49</math>), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as <math>a \pm bi</math> for real numbers <math>a</math> and <math>b</math>.</li> </ol>	<p>comprehension involves analysis of its underlying structure. This may suggest a different but equivalent way of writing the expression that exhibits some different aspect of its meaning. Viewing an expression as the result of operation on simpler expressions can sometimes clarify its underlying structure.</p> <p>Understand how the concept of function can be used to interpret, analyze and model functions that emerge from contexts including those contexts that are purely mathematical.</p> <p>Because we continually make theories about dependencies between quantities in nature and society, functions are important tools in the construction of mathematical models.</p>	<p>Use quadratic functions to describe situations</p> <p>Recognize, evaluate, and graph direct variation functions and polynomial functions</p> <p>Explore functions that involve radicals</p> <p>Use these functions to solve problems</p> <p>Understand how rational functions are different from other types of functions</p> <p>Use rational functions to solve problems</p> <p>Find a function of a function</p>	<p>Unit Project Lesson Quiz Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p><b>CC.9-12.A.REI.4b</b></p> <p>Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If <math>f</math> is a function and <math>x</math> is an element of its domain, then <math>f(x)</math> denotes the output of <math>f</math> corresponding to the input <math>x</math>. The graph of <math>f</math> is the graph of the equation <math>y = f(x)</math>. <b>CC.9-12.F.IF.1</b></p> <p>Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context. <b>CC.9-12.F.IF.2</b></p> <p>For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. <i>Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.*</i> <b>CC.9-12.F.IF.4</b></p> <p>Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. <i>For example, if the function <math>h(n)</math> gives the number of person-hours it takes to assemble <math>n</math> engines in a factory, then the positive integers would be an appropriate domain for the function.*</i> <b>CC.9-12.F.IF.5</b></p> <p>Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.* <b>CC.9-12.F.IF.6</b></p> <p>Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.* <b>CC.9-12.F.IF.7</b></p> <ol style="list-style-type: none"> <li>1. Graph linear and quadratic functions and show intercepts, maxima, and minima. <b>CC.9-12.F.IF.7a</b></li> <li>2. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions. <b>CC.9-12.F.IF.7b</b></li> <li>3. Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior. <b>CC.9-12.F.IF.7c</b></li> </ol> <p>Write a function defined by an expression in different but equivalent</p>			

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>forms to reveal and explain different properties of the function. <b>CC.9-12.F.IF.8</b></p> <p>1. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. <b>CC.9-12.F.IF.8a</b></p> <p>Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <i>For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.</i> <b>CC.9-12.F.IF.9</b></p> <p>Write a function that describes a relationship between two quantities.* <b>CC.9-12.F.BF.1</b></p> <p>a. Determine an explicit expression, a recursive process, or steps for calculation from a context. <b>CC.9-12.F.BF.1a</b></p>			
<p><b>Unit Three: Logical Reasoning and Methods of Proof</b>  <b>Timeline: 16 days</b></p>			
<p>Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. <b>CC.9-12.G.CO.1</b></p> <p>Prove theorems about parallelograms. <i>Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.</i> <b>CC.9-12.G.CO.11</b></p> <p>Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle. <b>CC.9-12.G.CO.13</b></p> <p>Identify and describe relationships among inscribed angles, radii, and chords. <i>Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.</i> <b>CC.9-12.G.C.2</b></p> <p>Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle. <b>CC.9-12.G.C.3</b></p>	<p>Properties of Circles can be described by theorems that integrate algebraic and geometric understanding, modeling, and proof.</p> <p>Properties of Circles can be used to derive an understanding of the radian measure of an angle.</p> <p>The concept of congruence and symmetry can be understood from the perspective of geometric transformation.</p> <p>Once the triangle congruence criteria (ASA, SAS, and SSS) are established using rigid motions, they can be used to prove theorems about triangles, quadrilaterals, and other geometric figures</p>	<p>Review proofs and explore the relationship between implications and their converses, inverses and contrapositives</p> <p>Compare and contrast coordinate and synthetic methods of proof</p> <p>Understand the need for clear definitions</p> <p>Reconsider the definition of trapezoid</p> <p>Find formulas for the sums of interior and exterior angle measures in polygons</p> <p>Examine relationships between inscribed polygons and circles</p> <p>Examine relationships between</p>	<p><b>Informal:</b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Tickets</p> <p><b>Formal Assessment:</b>  Working on Unit Project  Unit Project  Lesson Quiz  Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>(+) Construct a tangent line from a point outside a given circle to the circle. <b>CC.9-12.G.C.4</b></p>		<p>inscribed angles and arcs of circles</p> <p>Use indirect proof in geometric, algebraic, and everyday contexts</p> <p>Examine the properties of tangents to circles</p> <p>Examine relationships between circumscribed polygons and circles</p> <p>Recognize the five regular polyhedra and examine properties of regular and semiregular polyhedral</p>	
<p><b>Unit Four: Sequences and Series</b> <b>Timeline: 15 days</b></p>			
<p>Derive the formula for the sum of a finite geometric series (when the common ratio is not 1), and use the formula to solve problems. <i>For example, calculate mortgage payments.*</i> <b>CC.9-12.A.SSE.4</b></p> <p>Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. <i>For example, the Fibonacci sequence is defined recursively by <math>f(0) = f(1) = 1, f(n+1) = f(n) + f(n-1)</math> for <math>n \geq 1</math>.</i> <b>CC.9-12.F.IF.3</b></p> <p>Write a function that describes a relationship between two quantities.* <b>CC.9-12.F.BF.1</b></p> <ol style="list-style-type: none"> <li>Determine an explicit expression, a recursive process, or steps for calculation from a context. <b>CC.9-12.F.BF.1a</b></li> </ol> <p>Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.* <b>CC.9-12.F.BF.2</b></p>	<p>Understand how the concept of function can be used to interpret, analyze and model functions that emerge from contexts including those contexts that are purely mathematical.</p> <p>Because we continually make theories about dependencies between quantities in nature and society, functions are important tools in the construction of mathematical models.</p>	<p>Describe and continue patterns</p> <p>Graph sequences and find apparent limits</p> <p>Use subscripts and formulas for sequences</p> <p>Write and use formulas for sequences in which each term is found by using the preceding term(s)</p> <p>Identify sequences that have a common difference, a common ratio, or neither</p> <p>Write explicit and recursive formulas</p> <p>Find the sum of a finite non geometric series</p> <p>Use a formula to find the sum</p>	<p><b>Informal:</b> Exercises &amp; Practice Additional Examples Quick Quizzes Unit Checkpoint Unit Review &amp; Assessment Exit Tickets</p> <p><b>Formal Assessment:</b> Working on Unit Project Unit Project Lesson Quiz Unit Test</p>

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		of a finite geometric series Find the sum of an infinite geometric series	
<b>Unit Five: Exponential and Logarithmic Functions</b> <b>Timeline: 17 days</b>			
<p>Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. <i>For example, we define <math>5^{1/3}</math> to be the cube root of 5 because we want <math>(5^{1/3})^3 = 5^{(1/3)3}</math> to hold, so <math>(5^{1/3})^3</math> must equal 5.</i> <b>CC.9-12.N.RN.1</b></p> <p>Rewrite expressions involving radicals and rational exponents using the properties of exponents. <b>CC.9-12.N.RN.2</b></p> <p>Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational. <b>CC.9-12.N.RN.3</b></p> <p>Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.* <b>CC.9-12.A.SSE.3</b></p> <p>c. Use the properties of exponents to transform expressions for exponential functions. <i>For example the expression <math>1.15^t</math> can be rewritten as <math>(1.15^{1/12})^{12t} \approx 1.012^{12t}</math> to reveal the approximate equivalent monthly interest rate if the annual rate is 15%.</i> <b>CC.9-12.A.SSE.3c</b></p> <p>Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.* <b>CC.9-12.F.IF.7</b></p> <p>e. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude. <b>CC.9-12.F.IF.7e</b></p> <p>Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. <b>CC.9-12.F.IF.8</b></p> <p>b. Use the properties of exponents to interpret expressions for exponential functions. <i>For example, identify percent rate of change</i></p>	<p>How properties of rational exponents, rational number, and irrational number are defined using characteristic patterns of equivalency and computation, to build a comprehensive knowledge of the structure and order of the real number system</p> <p>Understand how the concept of function can be used to interpret, analyze and model functions that emerge from contexts including those contexts that are purely mathematical.</p> <p>Because we continually make theories about dependencies between quantities in nature and society, functions are important tools in the construction of mathematical models.</p> <p>Functions presented as expressions can model many important phenomena. Two important families of functions characterized by laws of growth are linear functions, which grow at a constant rate, and exponential functions, which grow at a constant percent rate.</p>	<p>Use exponential growth and decay functions to model situations</p> <p>Use exponential functions with negative x-values to model situations</p> <p>Use expressions involving fractional exponents or radicals</p> <p>Model situations using exponential functions with fractional exponents</p> <p>Model situations using exponential functions with base e</p> <p>Find and graph inverse functions</p> <p>Recognize and evaluate logarithmic functions</p> <p>Use logarithmic functions to solve problems</p> <p>Learn about the properties of logarithms</p> <p>Use these properties to solve problems</p> <p>Use exponential and logarithmic equations to solve real-life problems</p>	<p><b>Informal:</b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Tickets</p> <p><b>Formal Assessment:</b>  Working on Unit Project  Unit Project  Lesson Quiz  Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p><i>in functions such as <math>y = (1.02)^t</math>, <math>y = (0.97)^t</math>, <math>y = (1.01)^{12t}</math>, <math>y = (1.2)^{t/10}</math>, and classify them as representing exponential growth or decay. <b>CC.9-12.F.IF.8b</b></i></p> <p>Find inverse functions. <b>CC.9-12.F.BF.4</b></p> <ol style="list-style-type: none"> <li>Solve an equation of the form <math>f(x) = c</math> for a simple function <math>f</math> that has an inverse and write an expression for the inverse. <i>For example, <math>f(x) = 2x^3</math> or <math>f(x) = (x+1)/(x-1)</math> for <math>x \neq 1</math>.</i> <b>CC.9-12.F.BF.4a</b></li> <li>(+) Verify by composition that one function is the inverse of another. <b>CC.9-12.F.BF.4b</b></li> <li>(+) Read values of an inverse function from a graph or a table, given that the function has an inverse. <b>CC.9-12.F.BF.4c</b></li> </ol> <p>(+) Understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents. <b>CC.9-12.F.BF.5</b></p> <p>Distinguish between situations that can be modeled with linear functions and with exponential functions. <b>CC.9-12.F.LE.1</b></p> <ol style="list-style-type: none"> <li>Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. <b>CC.9-12.F.LE.1a</b></li> <li>Recognize situations in which one quantity changes at a constant rate per unit interval relative to another. <b>CC.9-12.F.LE.1b</b></li> <li>Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another. <b>CC.9-12.F.LE.1c</b></li> </ol> <p>Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table). <b>CC.9-12.F.LE.2</b></p> <p>Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function. <b>CC.9-12.F.LE.3</b></p> <p>For exponential models, express as a logarithm the solution to <math>ab^{ct} = d</math></p>			

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<p>where <math>a</math>, <math>c</math>, and <math>d</math> are numbers and the base <math>b</math> is 2, 10, or <math>e</math>; evaluate the logarithm using technology. <b>CC.9-12.F.LE.4</b></p> <p>Interpret the parameters in a linear or exponential function in terms of a context. <b>CC.9-12.F.LE.5</b></p>			
<p><b>Unit Six: Modeling and Analyzing Data</b>  <b>Timeline: 12 days</b></p>			
<p>Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. <b>CC.9-12.S.ID.2</b></p> <p>Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). <b>CC.9-12.S.ID.3</b></p> <p>Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve. <b>CC.9-12.S.ID.4</b></p> <p>Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. <b>CC.9-12.S.ID.6</b></p> <ol style="list-style-type: none"> <li>Fit a function to the data; use functions fitted to data to solve problems in the context of the data. <i>Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models.</i> <b>CC.9-12.S.ID.6a</b></li> <li>Informally assess the fit of a function by plotting and analyzing residuals. <b>CC.9-12.S.ID.6b</b></li> <li>Fit a linear function for a scatter plot that suggests a linear association. <b>CC.9-12.S.ID.6c</b></li> </ol> <p>Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data. <b>CC.9-12.S.ID.7</b></p> <p>Compute (using technology) and interpret the correlation coefficient of a linear fit. <b>CC.9-12.S.ID.8</b></p> <p>Understand statistics as a process for making inferences about population parameters based on a random sample from that population. <b>CC.9-12.S.IC.1</b></p>	<p>Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. <b>CC.9-12.S.ID.2</b></p> <p>Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). <b>CC.9-12.S.ID.3</b></p> <p>Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve. <b>CC.9-12.S.ID.4</b></p> <p>Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. <b>CC.9-12.S.ID.6</b></p> <ol style="list-style-type: none"> <li>Fit a function to the</li> </ol>	<p>Identify different types of frequency distribution</p> <p>Use mean, range, and standard deviation to compare data sets with technology</p> <p>Recognize special properties of normal distributions</p> <p>Identify data as fitting a linear model</p> <p>Use technology to find the equations of fitted lines</p> <p>Decide whether a quadratic model fits data.</p> <p>Use technology and matrices to find quadratic models</p>	<p><b>Informal:</b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Tickets</p> <p><b>Formal Assessment:</b>  Working on Unit Project  Unit Project  Lesson Quiz  Unit Test</p>

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	<p>data; use functions fitted to data to solve problems in the context of the data. <i>Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models.</i></p> <p><b>CC.9-12.S.ID.6a</b></p> <p>b. Informally assess the fit of a function by plotting and analyzing residuals. <b>CC.9-12.S.ID.6b</b></p> <p>c. Fit a linear function for a scatter plot that suggests a linear association. <b>CC.9-12.S.ID.6c</b></p> <p>Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data. <b>CC.9-12.S.ID.7</b></p> <p>Compute (using technology) and interpret the correlation coefficient of a linear fit. <b>CC.9-12.S.ID.8</b></p> <p>Understand statistics as a process for making inferences about population parameters based on a random sample from that population. <b>CC.9-12.S.IC.1</b></p>		
<p><b>Unit Seven: Applying Probability Models</b>  <b>Timeline: 14 days</b></p>			
Understand statistics as a process for making inferences about	The conditions under which data	Use simulations with random	<b>Informal:</b>

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<p>population parameters based on a random sample from that population. <b>CC.9-12.S.IC.1</b></p> <p>Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. <i>For example, a model says a spinning coin falls heads up with probability 0.5. Would a result of 5 tails in a row cause you to question the model?</i> <b>CC.9-12.S.IC.2</b></p> <p>Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each. <b>CC.9-12.S.IC.3</b></p> <p>Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling. <b>CC.9-12.S.IC.4</b></p> <p>Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant. <b>CC.9-12.S.IC.5</b></p> <p>Evaluate reports based on data. <b>CC.9-12.S.IC.6</b></p> <p>Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events ("or," "and," "not"). <b>CC.9-12.S.CP.1</b></p> <p>Understand that two events <math>A</math> and <math>B</math> are independent if the probability of <math>A</math> and <math>B</math> occurring together is the product of their probabilities, and use this characterization to determine if they are independent. <b>CC.9-12.S.CP.2</b></p> <p>Understand the conditional probability of <math>A</math> given <math>B</math> as <math>P(A \text{ and } B)/P(B)</math>, and interpret independence of <math>A</math> and <math>B</math> as saying that the conditional probability of <math>A</math> given <math>B</math> is the same as the probability of <math>A</math>, and the conditional probability of <math>B</math> given <math>A</math> is the same as the probability of <math>B</math>. <b>CC.9-12.S.CP.3</b></p> <p>Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. <i>For example, collect data from a random sample of students in your school on their favorite subject</i></p>	<p>are collected are important in drawing conclusions from the data; in critically reviewing uses of statistics in public media and other reports, it is important to consider the study design, how the data were gathered, and the analyses employed as well as the data summaries and the conclusions drawn.</p> <p>Collecting data from a random sample of a population makes it possible to draw valid conclusions about the whole population, taking variability into account.</p> <p>Randomly assigning individuals to different treatments allows a fair comparison of the effectiveness of those treatments.</p> <p>In a probability model, sample points represent outcomes and combine to make up events.</p> <p>The probabilities of the events can be computed by applying the Addition and Multiplication Rules.</p> <p>Interpreting these probabilities relies on an understanding of independence and conditional probability, which can be approached through the analysis of two-way tables.</p>	<p>numbers to solve problems</p> <p>Find probabilities in situations with continuous outcomes and with discrete outcomes</p> <p>Find the probability that either of two events occurs</p> <p>Use area models with coordinates to solve probability problems</p> <p>Find conditional probabilities</p> <p>Recognize independent and dependent events</p> <p>Find the average gain or loss in a situation</p> <p>Find probabilities in binomial experiments</p> <p>Use significance levels in statistical decision-making</p>	<p>Exercises &amp; Practice Additional Examples Quick Quizzes Unit Checkpoint Unit Review &amp; Assessment Exit Tickets</p> <p><b>Formal Assessment:</b> Working on Unit Project Unit Project Lesson Quiz Unit Test</p>

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<p><i>among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results. CC.9-12.S.CP.4</i></p> <p>Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. <i>For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer. CC.9-12.S.CP.5</i></p> <p>Find the conditional probability of <math>A</math> given <math>B</math> as the fraction of <math>B</math>'s outcomes that also belong to <math>A</math>, and interpret the answer in terms of the model. <b>CC.9-12.S.CP.6</b></p> <p>Apply the Addition Rule, <math>P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)</math>, and interpret the answer in terms of the model. <b>CC.9-12.S.CP.7</b></p> <p>(+) Apply the general Multiplication Rule in a uniform probability model, <math>P(A \text{ and } B) = P(A)P(B A) = P(B)P(A B)</math>, and interpret the answer in terms of the model. <b>CC.9-12.S.CP.8</b></p> <p>(+) Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions. <b>CC.9-12.S.MD.1</b></p> <p>(+) Calculate the expected value of a random variable; interpret it as the mean of the probability distribution. <b>CC.9-12.S.MD.2</b></p> <p>(+) Develop a probability distribution for a random variable defined for a sample space in which theoretical probabilities can be calculated; find the expected value. <i>For example, find the theoretical probability distribution for the number of correct answers obtained by guessing on all five questions of a multiple-choice test where each question has four choices, and find the expected grade under various grading schemes. CC.9-12.S.MD.3</i></p> <p>(+) Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value. <i>For example, find a current data distribution on the number of TV sets per household in the United States, and calculate the</i></p>			

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<p><i>expected number of sets per household. How many TV sets would you expect to find in 100 randomly selected households?</i> <b>CC.9-12.S.MD.4</b></p> <p>(+) Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values. <b>CC.9-12.S.MD.5</b></p> <p>a. Find the expected payoff for a game of chance. For example, find the expected winnings from a state lottery ticket or a game at a fast-food restaurant. <b>CC.9-12.S.MD.5a</b></p> <p>b. Evaluate and compare strategies on the basis of expected values. <i>For example, compare a high-deductible versus a low-deductible automobile insurance policy using various, but reasonable, chances of having a minor or a major accident.</i> <b>CC.9-12.S.MD.5b</b></p> <p>(+) Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator). <b>CC.9-12.S.MD.6</b></p> <p>(+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game). <b>CC.9-12.S.MD.7</b></p>			
<p><b>Unit Eight: Angles, Trigonometry, and Vectors</b>  <b>Timeline: 15 days</b></p>			
<p>(+) Recognize vector quantities as having both magnitude and direction. Represent vector quantities by directed line segments, and use appropriate symbols for vectors and their magnitudes (e.g., <math>\mathbf{v}</math>, <math> \mathbf{v} </math>, <math>\ \mathbf{v}\ </math>, <math>v</math>). <b>CC.9-12.N.VM.1</b></p> <p>(+) Find the components of a vector by subtracting the coordinates of an initial point from the coordinates of a terminal point. <b>CC.9-12.N.VM.2</b></p> <p>(+) Solve problems involving velocity and other quantities that can be represented by vectors. <b>CC.9-12.N.VM.3</b></p> <p>(+) Add and subtract vectors. <b>CC.9-12.N.VM.4</b></p> <p>a. Add vectors end-to-end, component-wise, and by the parallelogram rule. Understand that the magnitude of a sum of two vectors is typically not the sum of the magnitudes. <b>CC.9-12.N.VM.4a</b></p> <p>b. Given two vectors in magnitude and direction form, determine</p>	<p>Use vectors and matrices to illustrate the effects of transformations of objects.</p> <p>The connection between extending the domain of trigonometric functions using the unit circle and graphing trigonometric functions in the Cartesian coordinate system to model periodic phenomena across the extended domain.</p> <p>That the graph of a function is a useful way of visualizing the relationship of the function models, and manipulating a</p>	<p>Use polar coordinates to locate points</p> <p>Convert from polar to rectangular coordinates and vice versa</p> <p>Extend the definitions of cosine, sine, and tangent</p> <p>Use a Pythagorean identity</p> <p>Use drawings of vectors to solve problems</p> <p>Use algebra to solve problems involving vectors</p> <p>Use parametric equations to</p>	<p><b>Informal:</b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint  Unit Review &amp; Assessment  Exit Tickets</p> <p><b>Formal Assessment:</b>  Working on Unit Project  Unit Project  Lesson Quiz  Unit Test</p>

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<p>the magnitude and direction of their sum. <b>CC.9-12.N.VM.4b</b></p> <p>c. Understand vector subtraction <math>\mathbf{v} - \mathbf{w}</math> as <math>\mathbf{v} + (-\mathbf{w})</math>, where <math>-\mathbf{w}</math> is the additive inverse of <math>\mathbf{w}</math>, with the same magnitude as <math>\mathbf{w}</math> and pointing in the opposite direction. Represent vector subtraction graphically by connecting the tips in the appropriate order, and perform vector subtraction component-wise. <b>CC.9-12.N.VM.4c</b></p> <p>(+) Multiply a vector by a scalar. <b>CC.9-12.N.VM.5</b></p> <p>a. Represent scalar multiplication graphically by scaling vectors and possibly reversing their direction; perform scalar multiplication component-wise, e.g., as <math>c(v_x, v_y) = (cv_x, cv_y)</math>. <b>CC.9-12.N.VM.5a</b></p> <p>b. Compute the magnitude of a scalar multiple <math>c\mathbf{v}</math> using <math>\ c\mathbf{v}\  =  c \mathbf{v} </math>. Compute the direction of <math>c\mathbf{v}</math> knowing that when <math> c \mathbf{v} \neq 0</math>, the direction of <math>c\mathbf{v}</math> is either along <math>\mathbf{v}</math> (for <math>c &gt; 0</math>) or against <math>\mathbf{v}</math> (for <math>c &lt; 0</math>). <b>CC.9-12.N.VM.5b</b></p> <p>Prove the Pythagorean identity <math>\sin^2(\theta) + \cos^2(\theta) = 1</math> and use it to find <math>\sin(\theta)</math>, <math>\cos(\theta)</math>, or <math>\tan(\theta)</math> given <math>\sin(\theta)</math>, <math>\cos(\theta)</math>, or <math>\tan(\theta)</math> and the quadrant of the angle. <b>CC.9-12.F.TF.8</b></p> <p>(+) Prove the addition and subtraction formulas for sine, cosine, and tangent and use them to solve problems. <b>CC.9-12.F.TF.9</b></p> <p>Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.* <b>CC.9-12.G.SRT.8</b></p> <p>(+) Prove the Laws of Sines and Cosines and use them to solve problems. <b>CC.9-12.G.SRT.10</b></p> <p>(+) Understand and apply the Law of Sines and the Law of Cosines to find unknown measurements in right and non-right triangles (e.g., surveying problems, resultant forces). <b>CC.9-12.G.SRT.11</b></p>	<p>mathematical expression for a function can throw light on the function's properties (amplitude, frequency, and midline).</p> <p>Similarity transformations (rigid motions followed by dilations) define similarity in the same way that rigid motions define congruence, thereby formalizing the similarity ideas of "same shape" and "scale factor" developed in the middle grades.</p> <p>These transformations lead to the criterion for triangle similarity that two pairs of corresponding angles are congruent.</p> <p>The definition of trigonometric ratios is not only useful in solving right triangle problems but can also be applied to general triangles.</p>	<p>solve problems</p> <p>Derive the law of cosines and use it to find measures of sides and angles in triangles</p> <p>Use the law of sines to find measures of sides and angles in triangles.</p>	
<p><b>Unit Nine: Transformations of Graphs and Data</b>  <b>Timeline: 16 days</b></p>			
<p>(+) Use matrices to represent and manipulate data, e.g., to represent payoffs or incidence relationships in a network. <b>CC.9-12.N.VM.6</b></p> <p>(+) Multiply matrices by scalars to produce new matrices, e.g., as when all of the payoffs in a game are doubled. <b>CC.9-12.N.VM.7</b></p>	<p>Data are gathered, displayed, summarized, examined, and interpreted to discover patterns and deviations from patterns.</p>	<p>Recognize the effect that adding a constant to data values has on the mean, median, range, and standard deviation</p>	<p><b>Informal:</b>  Exercises &amp; Practice  Additional Examples  Quick Quizzes  Unit Checkpoint</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>(+) Add, subtract, and multiply matrices of appropriate dimensions. <b>CC.9-12.N.VM.8</b>            Represent data with plots on the real number line (dot plots, histograms, and box plots). <b>CC.9-12.S.ID.1</b></p> <p>Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. <b>CC.9-12.S.ID.2</b></p> <p>Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). <b>CC.9-12.S.ID.3</b></p> <p>Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve. <b>CC.9-12.S.ID.4</b></p>	<p>Which statistics to compare, which plots to use, and what the results of a comparison might mean, depend on the question to be investigated and the real-life actions to be taken.</p> <p>When making statistical models, technology is valuable for varying assumptions, exploring consequences and comparing predictions with data.</p> <p>Causation implies correlation yet correlation does not imply causation.</p>	<p>Recognize the relationship between the graph of <math>y-k = f(x-h)</math> and the parent graph of <math>y = f(x)</math></p> <p>Recognize the effect that multiplying data values by a constant has on the mean, median, and standard deviation</p> <p>Recognize the effects of horizontal and vertical stretches on sets of points and graphs of functions</p> <p>Recognize the effects of multiple transformations on sets of data and graphs of functions</p> <p>Use z-scores and the standard normal distribution to compare data</p> <p>Recognize the effect of a reflection on a graph and on the graph's equation</p>	<p>Unit Review &amp; Assessment            Exit Tickets</p> <p><b>Formal Assessment:</b>            Working on Unit Project            Unit Project            Lesson Quiz            Unit Test</p>
<p><b>Unit Ten: Periodic Models</b>  <b>Timeline: 15 days</b></p>			
<p>(+) Use the unit circle to explain symmetry (odd and even) and periodicity of trigonometric functions. <b>CC.9-12.F.TF.4</b></p> <p>Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.* <b>CC.9-12.F.TF.5</b></p> <p>(+) Understand that restricting a trigonometric function to a domain on which it is always increasing or always decreasing allows its inverse to be constructed. <b>CC.9-12.F.TF.6</b></p>	<p>The connection between extending the domain of trigonometric functions using the unit circle and graphing trigonometric functions in the Cartesian coordinate system to model periodic phenomena across the extended domain. That the graph of a function is a useful way of visualizing the relationship of the function models, and manipulating a mathematical expression for a</p>	<p>Describe graphs and examine rates of change</p> <p>Recognize the periodic functions and features of their graphs</p> <p>Recognize and understand characteristics of the graphs of the sine function and the cosine functions</p> <p>Recognize and understand characteristics of the graphs of sine functions and cosine</p>	<p><b>Informal:</b>            Exercises &amp; Practice            Additional Examples            Quick Quizzes            Unit Checkpoint            Unit Review &amp; Assessment            Exit Tickets</p> <p><b>Formal Assessment:</b>            Working on Unit Project            Unit Project            Lesson Quiz            Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
	<p>function can throw light on the function's properties (amplitude, frequency, and midline).</p>	<p>functions that are transformed.</p> <p>Use sine and cosine functions to model periodic situations</p> <p>Recognize periodic border patterns</p> <p>Use transformations to classify and create border patterns</p> <p>Recognize, classify and create tessellations.</p>	

## Curriculum Framework for Pre-Calculus/Calculus

School: Newark Charter School

Curricular Tool: Calculus I with Pre-Calculus (Larson & Edwards)

Grade: 12

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<b>Unit P: Prerequisites</b> <b>Timeline : 10 days</b>			
<p>Interpret expressions that represent a quantity in terms of its context.* <b>CC.9-12.A.SSE.1</b></p> <p>a. Interpret parts of an expression, such as terms, factors, and coefficients. <b>CC.9-12.A.SSE.1a</b></p> <p>b. Interpret complicated expressions by viewing one or more of their parts as a single entity. <i>For example, interpret <math>P(1+r)^n</math> as the product of <math>P</math> and a factor not depending on <math>P</math>.</i> <b>CC.9-12.A.SSE.1b</b></p> <p>Use the structure of an expression to identify ways to rewrite it. <i>For example, see <math>x^4 - y^4</math> as <math>(x^2)^2 - (y^2)^2</math>, thus recognizing it as a difference of squares that can be factored as <math>(x^2 - y^2)(x^2 + y^2)</math>.</i> <b>CC.9-12.A.SSE.2</b></p> <p>Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.* <b>CC.9-12.A.SSE.3</b></p> <p>c. Factor a quadratic expression to reveal the zeros of the function it defines. <b>CC.9-12.A.SSE.3a</b></p> <p>d. Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines. <b>CC.9-12.A.SSE.3b</b></p> <p>e. Use the properties of exponents to transform expressions for exponential functions. <i>For example the expression <math>1.15^t</math> can be rewritten as <math>(1.15^{1/12})^{12t} \approx 1.012^{12t}</math> to reveal the approximate equivalent monthly interest rate if the annual rate is 15%.</i> <b>CC.9-12.A.SSE.3c</b></p> <p>Understand that polynomials form a system analogous to the integers, namely, they are closed under the</p>	<p>Reading an expression with comprehension involves analysis of its underlying structure. This may suggest a different but equivalent way of writing the expression that exhibits some different aspect of its meaning.</p> <p>Viewing an expression as the result of operation on simpler expressions can sometimes clarify its underlying structure.</p> <p>How to extend and apply the conceptual understanding of arithmetic structures and operation to polynomials.</p> <p>Algebraic manipulations are governed by the properties of operations and exponents, and the conventions of algebraic notation.</p> <p>An equation is a record of a computation with numbers, symbols that represent numbers, arithmetic operations, exponentiation,</p>	<p><b>Learning Targets:</b></p> <p>Students will identify different types of equations</p> <p>Students will solve linear equations in one variable and equations that lead to linear equations</p> <p>Students will solve quadratic equations by factoring, extracting square roots, completing the square, and using the quadratic formula</p> <p>Students will solve polynomial equations of degree three or greater</p> <p>Students will solve equations using radicals</p> <p>Students will solve equations with absolute value</p> <p>Students will represent solutions of linear inequalities in one variable</p> <p>Students will represent use properties of inequalities to create equivalent inequalities and solve inequalities in one variable</p> <p>Students will solve inequalities involving absolute value</p> <p>Students will solve polynomial inequalities and</p>	<p><b>Formative:</b></p> <p>Lesson Exercises            Review Exercises            Textbook Chapter Test            Problem Solving problems</p> <p><b>Summative Assessment:</b></p> <p>Capstones            Lesson quizzes            Unit Test</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p>operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. <b>CC.9-12.A.APR.1</b></p> <p>Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial. <b>CC.9-12.A.APR.3</b></p> <p>Rewrite simple rational expressions in different forms; write <math>a(x)/b(x)</math> in the form <math>q(x) + r(x)/b(x)</math>, where <math>a(x)</math>, <math>b(x)</math>, <math>q(x)</math>, and <math>r(x)</math> are polynomials with the degree of <math>r(x)</math> less than the degree of <math>b(x)</math>, using inspection, long division, or, for the more complicated examples, a computer algebra system. <b>CC.9-12.A.APR.6</b></p> <p>Create equations and inequalities in one variable and use them to solve problems. <i>Include equations arising from linear and quadratic functions, and simple rational and exponential functions.</i> <b>CC.9-12.A.CED.1</b></p> <p>Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. <b>CC.9-12.A.CED.2</b></p> <p>Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context. <i>For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.</i> <b>CC.9-12.A.CED.3</b></p> <p>Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. <i>For example, rearrange Ohm's law <math>V = IR</math> to highlight resistance <math>R</math>.</i> <b>CC.9-12.A.CED.4</b></p> <p>Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable</p>	<p>and, at more advanced levels, the operation of evaluating a function.</p> <p>Numeric relationships can be symbolically represented as equations and inequalities and fluency in transforming these symbolic representations is a tool for graphing and solving problems.</p> <p>Algebraic manipulations used to solve equations/systems are governed by the underlying properties and structure of number systems and the conventions of algebraic notation.</p>	<p>rational inequalities</p> <p>Students will plot points in the Cartesian plane</p> <p>Students will use the distance formula to find the distance between two points and use the midpoint formula to find the midpoint of a line segment</p> <p>Students will use a coordinate plane to model and solve real-life problems</p> <p>Students will sketch graphs of equations</p> <p>Students will find x- and y- intercepts of graphs of equations</p> <p>Students will use symmetry to sketch graphs of equations</p> <p>Students will find equations of and sketch graphs of circles</p> <p>Students will use graphs of equations in solving real-life problems</p> <p>Students will use slope to graph linear equations in two variable</p> <p>Students will find the slope of a line given two points on the line</p> <p>Students will write linear equations in two variables</p> <p>Students will use slope to identify parallel and perpendicular lines</p> <p>Students will use slope and linear equations in two variables to model and solve real-life</p>	

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p>argument to justify a solution method. <b>CC.9-12.A.REI.1</b></p> <p>Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. <b>CC.9-12.A.REI.3</b></p> <p>Solve quadratic equations in one variable. <b>CC.9-12.A.REI.4</b></p> <p>a. Use the method of completing the square to transform any quadratic equation in <math>x</math> into an equation of the form <math>(x - p)^2 = q</math> that has the same solutions. Derive the quadratic formula from this form. <b>CC.9-12.A.REI.4a</b></p> <p>b. Solve quadratic equations by inspection (e.g., for <math>x^2 = 49</math>), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as <math>a \pm bi</math> for real numbers <math>a</math> and <math>b</math>. <b>CC.9-12.A.REI.4b</b></p> <p>Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. <b>CC.9-12.A.REI.5</b></p> <p>Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. <b>CC.9-12.A.REI.6</b></p> <p>Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. <i>For example, find the points of intersection between the line <math>y = -3x</math> and the circle <math>x^2 + y^2 = 3</math>.</i> <b>CC.9-12.A.REI.7</b></p> <p>Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). <b>CC.9-12.A.REI.10</b></p>		problems	

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p>Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. <b>CC.9-12.G.CO.1</b></p> <p>Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation. <b>CC.9-12.G.GPE.1</b></p> <p>Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point). <b>CC.9-12.G.GPE.5</b></p> <p>Find the point on a directed line segment between two given points that partitions the segment in a given ratio. <b>CC.9-12.G.GPE.6</b></p>			
<p><b>Unit One: Functions and their Graphs</b>  <b>Timeline : 12 days</b></p>			
<p>Use the structure of an expression to identify ways to rewrite it. <i>For example, see <math>x^4 - y^4</math> as <math>(x^2)^2 - (y^2)^2</math>, thus recognizing it as a difference of squares that can be factored as <math>(x^2 - y^2)(x^2 + y^2)</math>.</i> <b>CC.9-12.A.SSE.2</b></p> <p>Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. <b>CC.9-12.A.APR.1</b></p> <p>Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If <math>f</math> is a function and <math>x</math> is an element of its domain, then <math>f(x)</math> denotes the output of <math>f</math> corresponding to the input <math>x</math>. The graph of <math>f</math> is the graph of the equation <math>y = f(x)</math>. <b>CC.9-12.F.IF.1</b></p>	<p>Understand how the concept of function can be used to interpret, analyze and model functions that emerge from contexts including those contexts that are purely mathematical.</p> <p>Because we continually make theories about dependencies between quantities in nature and society, functions are important tools in the construction of mathematical models.</p>	<p><u>Essential Questions:</u></p> <p>How are functions recognized, represented, and evaluated?</p> <p>How are graphs of functions sketched and analyze?</p> <p>How can graphs of functions be transformed?</p> <p>How can functions be combined?</p> <p>How to find inverse functions?</p> <p>How can functions be used to model mathematical data?</p> <p><u>Learning Targets:</u></p> <p>Students will determine whether relations between two variables are functions.</p>	<p><u>Formative:</u></p> <p>Lesson Exercises  Review Exercises  Textbook Chapter Test  Problem Solving problems</p> <p><u>Summative Assessment:</u></p> <p>Capstones  Lesson quizzes  Unit Test</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p>Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context. <b>CC.9-12.F.IF.2</b></p> <p>For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. <i>Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.*</i> <b>CC.9-12.F.IF.4</b></p> <p>Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. <i>For example, if the function <math>h(n)</math> gives the number of person-hours it takes to assemble <math>n</math> engines in a factory, then the positive integers would be an appropriate domain for the function.*</i> <b>CC.9-12.F.IF.5</b></p> <p>Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.* <b>CC.9-12.F.IF.6</b></p> <p>Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.* <b>CC.9-12.F.IF.7</b></p> <p>a. Graph linear and quadratic functions and show intercepts, maxima, and minima. <b>CC.9-12.F.IF.7a</b></p> <p>Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. <b>CC.9-12.F.IF.8</b></p> <p>a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. <b>CC.9-12.F.IF.8a</b></p>		<p>Students will use function notation and evaluate functions.</p> <p>Students will find the domains of functions.</p> <p>Students will use functions to model and solve real-life problems</p> <p>Students will use the Vertical Line Test for functions</p> <p>Students will find the zeros of functions.</p> <p>Students will determine intervals on which functions are increasing or decreasing and determine relative maximum and relative minimum values of functions.</p> <p>Students will identify and graph linear functions</p> <p>Students will identify and graph step and other piecewise-defined functions</p> <p>Students will identify even and odd functions.</p> <p>Students will recognize graphs of common functions.</p> <p>Students will use vertical and horizontal shifts to sketch graphs of functions.</p> <p>Students will use reflections to sketch graphs of functions.</p> <p>Students will use non-rigid transformations to sketch graphs of functions.</p> <p>Students will add, subtract, multiply and divide functions.</p>	

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p>Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <i>For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.</i> <b>CC.9-12.F.IF.9</b></p> <p>Write a function that describes a relationship between two quantities.* <b>CC.9-12.F.BF.1</b></p> <p>a. Determine an explicit expression, a recursive process, or steps for calculation from a context. <b>CC.9-12.F.BF.1a</b></p> <p>b. Combine standard function types using arithmetic operations. <i>For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.</i> <b>CC.9-12.F.BF.1b</b></p> <p>c. (+) Compose functions. <i>For example, if <math>T(y)</math> is the temperature in the atmosphere as a function of height, and <math>h(t)</math> is the height of a weather balloon as a function of time, then <math>T(h(t))</math> is the temperature at the location of the weather balloon as a function of time.</i> <b>CC.9-12.F.BF.1c</b></p> <p>Identify the effect on the graph of replacing <math>f(x)</math> by <math>f(x) + k</math>, <math>k f(x)</math>, <math>f(kx)</math>, and <math>f(x + k)</math> for specific values of <math>k</math> (both positive and negative); find the value of <math>k</math> given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. <i>Include recognizing even and odd functions from their graphs and algebraic expressions for them.</i> <b>CC.9-12.F.BF.3</b></p> <p>Find inverse functions. <b>CC.9-12.F.BF.4</b></p> <p>a. Solve an equation of the form <math>f(x) = c</math> for a simple function <math>f</math> that has an inverse and write an expression for the inverse. <i>For example, <math>f(x) = 2x^3</math> or <math>f(x) = (x+1)/(x-1)</math> for <math>x \neq 1</math>.</i> <b>CC.9-12.F.BF.4a</b></p>		<p>Students will find the composition of one function with another function.</p> <p>Students will use combinations and compositions of functions to model and solve real-life problems.</p> <p>Students will find inverse functions Formatively and verify that two functions are inverse functions of each other.</p> <p>Students will use graphs of functions to determine whether functions have inverse functions.</p> <p>Students will use graphs of functions to determine whether functions have inverse functions.</p> <p>Students will use the Horizontal Line Test to determine if functions are one-on-one.</p> <p>Students will find inverse functions analytically.</p> <p>Students will use mathematical models to approximate sets of data points.</p> <p>Students will use the <i>regression</i> feature of a graphing utility to find the equation of a least squares regression line.</p> <p>Students will write mathematical models for direct variation.</p> <p>Students will write mathematical models for direct variations as an <math>n</math>th power.</p> <p>Students will write mathematical models for inverse variation.</p>	

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p>b. (+) Verify by composition that one function is the inverse of another. <b>CC.9-12.F.BF.4b</b></p> <p>c. (+) Read values of an inverse function from a graph or a table, given that the function has an inverse. <b>CC.9-12.F.BF.4c</b></p> <p>d. (+) Produce an invertible function from a non-invertible function by restricting the domain. <b>CC.9-12.F.BF.4d</b></p>		<p>Students will write mathematical models for joint variation.</p>	
<p><b>Unit Two: Polynomial and Rational Functions</b>  <b>Timeline: 12 days</b></p>			
<p>Know there is a complex number <math>i</math> such that <math>i^2 = -1</math>, and every complex number has the form <math>a + bi</math> with <math>a</math> and <math>b</math> real. <b>CC.9-12.N.CN.1</b></p> <p>Use the relation <math>i^2 = -1</math> and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers. <b>CC.9-12.N.CN.2</b></p> <p>(+) Find the conjugate of a complex number; use conjugates to find moduli and quotients of complex numbers. <b>CC.9-12.N.CN.3</b></p> <p>(+) Represent complex numbers on the complex plane in rectangular and polar form (including real and imaginary numbers), and explain why the rectangular and polar forms of a given complex number represent the same number. <b>CC.9-12.N.CN.4</b></p> <p>(+) Represent addition, subtraction, multiplication, and conjugation of complex numbers geometrically on the complex plane; use properties of this representation for computation. <i>For example, <math>(-1 + \sqrt{3}i)^3 = 8</math> because <math>(-1 + \sqrt{3}i)</math> has modulus 2 and argument <math>120^\circ</math>.</i> <b>CC.9-12.N.CN.5</b></p> <p>(+) Calculate the distance between numbers in the complex plane as the modulus of the difference, and the midpoint of a segment as the average of the numbers at its</p>	<p>How knowledge of number properties in the Real Number System can be used to develop and apply properties of the Complex Number System.</p> <p>How to extend and apply the conceptual understanding of arithmetic structures and operation to polynomials.</p> <p>Algebraic manipulations are governed by the properties of operations and exponents, and the conventions of algebraic notation.</p> <p>Algebraic manipulations used to solve equations/systems are governed by the underlying properties and structure of number systems and the conventions of algebraic notation.</p> <p>Understand how the concept of function can be used to</p>	<p><b>Learning Targets:</b></p> <p>Students will analyze graphs of quadratic functions.</p> <p>Students will write quadratic functions in standard form and use the results to sketch graphs of quadratic functions.</p> <p>Students will find minimum and maximum values of quadratic functions in real-life applications.</p> <p>Students will use transformations to sketch graphs of polynomial functions.</p> <p>Students will use the Leading Coefficient Test to determine the end behavior of graphs of polynomial functions.</p> <p>Students will find and use zeros of polynomial functions as sketching aids.</p> <p>Students will divide polynomials using long division.</p> <p>Students will use synthetic division to divide polynomials by binomials of the form <math>(x-k)</math>.</p>	<p><b>Formative:</b></p> <p>Lesson Exercises  Review Exercises  Textbook Chapter Test  Problem Solving problems</p> <p><b>Summative Assessment:</b></p> <p>Capstones  Lesson quizzes  Unit Test</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p>endpoints. <b>CC.9-12.N.CN.6</b></p> <p>Solve quadratic equations with real coefficients that have complex solutions. <b>CC.9-12.N.CN.7</b></p> <p>(+) Extend polynomial identities to the complex numbers. <i>For example, rewrite <math>x^2 + 4</math> as <math>(x + 2i)(x - 2i)</math>.</i> <b>CC.9-12.N.CN.8</b></p> <p>(+) Know the Fundamental Theorem of Algebra; show that it is true for quadratic polynomials. <b>CC.9-12.N.CN.9</b></p> <p>Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. <b>CC.9-12.A.APR.1</b></p> <p>Know and apply the Remainder Theorem: For a polynomial <math>p(x)</math> and a number <math>a</math>, the remainder on division by <math>x - a</math> is <math>p(a)</math>, so <math>p(a) = 0</math> if and only if <math>(x - a)</math> is a factor of <math>p(x)</math>. <b>CC.9-12.A.APR.2</b></p> <p>Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial. <b>CC.9-12.A.APR.3</b></p> <p>Prove polynomial identities and use them to describe numerical relationships. <i>For example, the polynomial identity <math>(x^2 + y^2)^2 = (x^2 - y^2)^2 + (2xy)^2</math> can be used to generate Pythagorean triples.</i> <b>CC.9-12.A.APR.4</b></p> <p>Rewrite simple rational expressions in different forms; write <math>a(x)/b(x)</math> in the form <math>q(x) + r(x)/b(x)</math>, where <math>a(x)</math>, <math>b(x)</math>, <math>q(x)</math>, and <math>r(x)</math> are polynomials with the degree of <math>r(x)</math> less than the degree of <math>b(x)</math>, using inspection, long division, or, for the more complicated examples, a computer algebra system. <b>CC.9-12.A.APR.6</b></p> <p>(+) Understand that rational expressions form a system analogous to the rational numbers, closed under addition,</p>	<p>interpret, analyze and model functions that emerge from contexts including those contexts that are purely mathematical.</p>	<p>Students will use the Remainder Theorem and the Factor Theorem.</p> <p>Students will use polynomial division to answer questions about real-life problems.</p> <p>Students will use the imaginary unit <math>i</math> to write complex numbers.</p> <p>Students will add, subtract and multiply complex numbers.</p> <p>Students will use complex conjugates to write the quotient of two complex numbers in standard form.</p> <p>Students will find complex solutions of quadratic equations.</p> <p>Students will understand and use the Fundamental Theorem of Algebra.</p> <p>Students will find all the zeros of a polynomial function.</p> <p>Students will write a polynomial function with real coefficients, given its zeros.</p> <p>Students will find the domains of rational functions.</p> <p>Students will find the vertical and horizontal asymptotes of graphs of rational functions.</p> <p>Students will analyze and sketch graphs of rational functions.</p> <p>Students sketch graphs of rational functions that</p>	

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p>subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions. <b>CC.9-12.A.APR.7</b></p> <p>Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise. <b>CC.9-12.A.REI.2</b></p> <p>Solve quadratic equations in one variable. <b>CC.9-12.A.REI.4</b></p> <ul style="list-style-type: none"> <li>a. Use the method of completing the square to transform any quadratic equation in <math>x</math> into an equation of the form <math>(x - p)^2 = q</math> that has the same solutions. Derive the quadratic formula from this form. <b>CC.9-12.A.REI.4a</b></li> <li>b. Solve quadratic equations by inspection (e.g., for <math>x^2 = 49</math>), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as <math>a \pm bi</math> for real numbers <math>a</math> and <math>b</math>. <b>CC.9-12.A.REI.4b</b></li> </ul> <p>Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.* <b>CC.9-12.F.IF.7</b></p> <ul style="list-style-type: none"> <li>a. Graph linear and quadratic functions and show intercepts, maxima, and minima. <b>CC.9-12.F.IF.7a</b></li> <li>b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions. <b>CC.9-12.F.IF.7b</b></li> <li>c. Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior. <b>CC.9-12.F.IF.7c</b></li> <li>d. (+) Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior. <b>CC.9-12.F.IF.7d</b></li> </ul>		<p>have start asymptote.</p> <p>Students will use rational functions to model and solve real-life problems.</p>	

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p>e. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude. <b>CC.9-12.F.IF.7e</b></p> <p>Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. <b>CC.9-12.F.IF.8</b></p> <p>a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. <b>CC.9-12.F.IF.8a</b></p> <p>b. Use the properties of exponents to interpret expressions for exponential functions. <i>For example, identify percent rate of change in functions such as <math>y = (1.02)^t</math>, <math>y = (0.97)^t</math>, <math>y = (1.01)^{12t}</math>, <math>y = (1.2)^{t/10}</math>, and classify them as representing exponential growth or decay.</i> <b>CC.9-12.F.IF.8b</b></p>			
<p><b>Unit Three: Limits and Their Properties</b>  <b>Timeline: 10</b></p>			
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ol>	<p>Calculus, along with geometric and analytic information, can explain the observed local and global behavior of a function.</p> <p>Limits can be determined using algebra, graphs and/or tables of data.</p> <p>The concept of a limit is one of the foundations of Calculus.</p> <p>The limit of a function is the value approached by <math>f(x)</math> as <math>x</math> is approaching a given value or</p>	<p><b><u>Learning Targets:</u></b></p> <p>Students will understand what calculus is and how it compares with pre-calculus.</p> <p>Students will understand that the tangent line problem is basic to calculus.</p> <p>Students will understand that the area problem is also basic to calculus.</p> <p>Students will estimate a limit using a numerical or graphical approach.</p> <p>Students will learn different ways that a limit</p>	<p><b><u>Formative:</u></b>  Lesson Exercises  Review Exercises  Textbook Chapter Test  Problem Solving problems</p> <p><b><u>Formal Assessment:</u></b>  Capstones  Lesson quizzes  Unit Test</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
	infinity.	<p>can fail to exist.</p> <p>Students will study and use a formal definition of limit.</p> <p>Students will evaluate a limit using properties of limits.</p> <p>Students will develop and use a strategy for finding limits.</p> <p>Students will evaluate a limit using dividing out and rationalizing techniques.</p> <p>Students will evaluate a limit using the Squeeze Theorem.</p> <p>Students will determine continuity at a point and continuity on an open interval.</p> <p>Students will determine one-sided limits and continuity on a closed interval.</p> <p>Students will use properties of continuity.</p> <p>Students will understand and use the Intermediate Value Theorem.</p> <p>Students will determine infinite limits from the left and from the right.</p> <p>Students will find and sketch the vertical asymptotes of the graph of a function.</p>	
<b>Unit Four: Differentiation</b> <b>Timeline: 12 days</b>			
This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.	The derivative is the instantaneous rate of change at a given point.	<u><b>Learning Targets:</b></u> Students will find the slope of the tangent line to a curve at a point.	<u><b>Formative:</b></u> Lesson Exercises Review Exercises Textbook Chapter Test

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ol>	<p>Derivatives can be used to analyze curves.</p> <p>Derivatives can be used to model rates of change.</p> <p>Derivatives can be used in optimization problems.</p>	<p>Students will use the limit definition to find the derivative of a function.</p> <p>Students will understand the relationship between differentiability and continuity.</p> <p>Students will find the derivative of a function using the Constant Rule.</p> <p>Students will find the derivative of a function using the Power Rule.</p> <p>Students will find the derivative of a function using the Constant Multiple Rule.</p> <p>Students will find the derivative of a function using the Sum and Difference Rules.</p> <p>Students will use derivatives to find rates of change.</p> <p>Students will find the derivative of a function using the Product Rule.</p> <p>Students will find the derivative of a function using the Quotient Rule.</p> <p>Students will find the higher-order derivative of a function.</p> <p>Students will find the derivative of a composite function using the Chain Rule.</p> <p>Students will find the derivative of a function using the General Power Rule.</p> <p>Students will simplify the derivative of a function using algebra.</p>	<p>Problem Solving problems</p> <p><b>Formal Assessment:</b>            Capstones            Lesson quizzes            Unit Test</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
		<p>Students will distinguish between functions written in implicit form and explicit form.</p> <p>Students will use implicit differentiation to find the derivative of a function.</p> <p>Students will find a related rate.</p> <p>Students will use related rates to solve real-life problems</p>	
<p><b>Unit Five: Applications of Differentiation</b>  <b>Timeline: 12 days</b></p>			
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ol>	<p>The limit of a function is the value approached by <math>f(x)</math> as <math>x</math> is approaching a given value or infinity.</p> <p>The first derivative determines increasing or decreasing and the second derivative determines concavity.</p>	<p><b><u>Learning Targets:</u></b></p> <p>Students will understand the definition of extrema of a function on an interval.</p> <p>Students will understand the definition of relative extrema of a function on an open interval.</p> <p>Students will find extrema on a closed interval.</p> <p>Students will understand and use Rolle's Theorem.</p> <p>Students will understand and use the Mean Value Theorem.</p> <p>Students will determine intervals on which a function is increasing or decreasing.</p> <p>Students will apply the First Derivative Test to find relative extrema of a function.</p> <p>Students will determine intervals on which a function is concave upward or concave downward.</p>	<p><b><u>Formative:</u></b></p> <p>Lesson Exercises  Review Exercises  Textbook Chapter Test  Problem Solving problems</p> <p><b><u>Formal Assessment:</u></b></p> <p>Capstones  Lesson quizzes  Unit Test</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
		<p>Students will find any points of inflection of the graph of a function.</p> <p>Students will apply the Second Derivative Test to find relative extrema of a function.</p> <p>Students will determine (finite) limits at infinity.</p> <p>Students will determine the horizontal asymptotes, if any, of the graph of a function.</p> <p>Students will determine infinite limits at infinity.</p> <p>Students will analyze and sketch the graph of a function.</p> <p>Students will use calculus to solve applied minimum and maximum problems.</p> <p>Students will understand the concept of a tangent line approximation.</p> <p>Students will compare the value of the differential, <math>dy</math>, with the actual change in <math>y</math>, <math>\Delta y</math>.</p> <p>Students will estimate a propagated error using a differential.</p> <p>Students will find the differential of a function using differentiation formulas.</p>	
<p><b>Unit Six: Integration</b>  <b>Timeline: 14 days</b></p>			
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p>	<p>Integration is a summation process.</p> <p>The Fundamental Theorems of</p>	<p><b><u>Learning Targets:</u></b></p> <p>Students will write the general solution of a differential equation.</p>	<p><b><u>Formative:</u></b></p> <p>Lesson Exercises  Review Exercises  Textbook Chapter Test</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ol>	<p>Calculus relate differentiation and integration as inverse functions.</p> <p>Antiderivatives follow directly from derivatives.</p> <p>Antiderivatives can be used to solve initial condition problems, including separable differential equations.</p> <p>There are several numerical techniques to approximate the definite integral.</p>	<p>Students will use indefinite integral notation for antiderivatives.</p> <p>Students will use basic integration rules to find antiderivatives.</p> <p>Students will find a particular solution of a differential equation.</p> <p>Students will use sigma notation to write and evaluate a sum.</p> <p>Students will understand the concept of area.</p> <p>Students will use rectangles to approximate the area of a plane region.</p> <p>Students will find the area of a plane region using limits.</p> <p>Students will understand the definition of a Riemann sum.</p> <p>Students will evaluate a definite integral using limits.</p> <p>Students will evaluate a definite integral using properties of definite integrals.</p> <p>Students will evaluate a definite integral using the Fundamental Theorem of Calculus.</p> <p>Students will understand and use the Mean Value Theorem for Integrals.</p> <p>Students will find the average value of a function over a closed interval.</p>	<p>Problem Solving problems</p> <p><b>Formal Assessment:</b>            Capstones            Lesson quizzes            Unit Test</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
		<p>Students will understand and use the Second Fundamental Theorem of Calculus.</p> <p>Students will understand and use the Net Change Theorem.</p> <p>Students will use pattern recognition to find an indefinite integral.</p> <p>Students will use a change of variables to find an indefinite integral.</p> <p>Students will use the General Power Rule for Integration to find an indefinite integral.</p> <p>Students will use a change of variables to evaluate a definite integral.</p> <p>Students will evaluate a definite integral involving an even or odd function.</p> <p>Students will approximate a definite integral using the Trapezoidal Rule.</p> <p>Students will approximate a definite integral using Simpson’s Rule.</p> <p>Students will analyze the approximate errors in the Trapezoidal Rule and Simpson’s Rule.</p>	
<p><b>Unit Seven: Exponential and Logarithmic Functions</b>  <b>Timeline: 12 days</b></p>			
<p>Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. <i>For example, we define <math>5^{1/3}</math> to be the cube root of 5 because we want <math>(5^{1/3})^3 = 5^{(1/3)3}</math> to hold, so <math>(5^{1/3})^3</math> must equal 5.</i> <b>CC.9-</b></p>	<p>How properties of rational exponents, rational number, and irrational number are defined using characteristic patterns of equivalency and computation, to build a comprehensive knowledge of</p>	<p><b><u>Learning Targets:</u></b></p> <p>Students will recognize and evaluate exponential functions with base <math>a</math>.</p> <p>Students will graph exponential functions.</p>	<p><b><u>Formative:</u></b></p> <p>Lesson Exercises  Review Exercises  Textbook Chapter Test  Problem Solving problems</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p><b>12.N.RN.1</b> Rewrite expressions involving radicals and rational exponents using the properties of exponents. <b>CC.9-12.N.RN.2</b></p> <p>Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational. <b>CC.9-12.N.RN.3</b></p> <p>Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.* <b>CC.9-12.F.IF.7</b> e. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude. <b>CC.9-12.F.IF.7e</b></p> <p>Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. <b>CC.9-12.F.IF.8</b> b. Use the properties of exponents to interpret expressions for exponential functions. For example, identify percent rate of change in functions such as <math>y = (1.02)^t</math>, <math>y = (0.97)^t</math>, <math>y = (1.01)^{12t}</math>, <math>y = (1.2)^{t/10}</math>, and classify them as representing exponential growth or decay. <b>CC.9-12.F.IF.8b</b></p> <p>Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <i>For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.</i> <b>CC.9-12.F.IF.9</b></p> <p>(+) Understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents. <b>CC.9-12.F.BF.5</b></p>	<p>the structure and order of the real number system.</p> <p>Understand how the concept of function can be used to interpret, analyze and model functions that emerge from contexts including those contexts that are purely mathematical.</p> <p>Functions presented as expressions can model many important phenomena. Two important families of functions characterized by laws of growth are linear functions, which grow at a constant rate, and exponential functions, which grow at a constant percent rate.</p>	<p>Students will recognize, evaluate and graph exponential functions with base <math>e</math>.</p> <p>Students will use exponential functions to model and solve real-life problems.</p> <p>Students will recognize and evaluate logarithmic functions with base <math>a</math>.</p> <p>Students will graph logarithmic functions.</p> <p>Students will recognize, evaluate and graph natural logarithmic functions.</p> <p>Students will use logarithmic functions to model and solve real-life problems.</p> <p>Students will use the change-of-base formula to rewrite and evaluate logarithmic expressions.</p> <p>Students will use properties of logarithms to evaluate or rewrite logarithmic expressions.</p> <p>Students will use properties of logarithms to expand or condense logarithmic expressions.</p> <p>Students will use logarithmic functions to model and solve real-life problems.</p> <p>Students will solve simple exponential and logarithmic equations.</p> <p>Students will solve more complicated exponential equations.</p> <p>Students will solve more complicated logarithmic equations.</p> <p>Students will use exponential and logarithmic</p>	<p><b>Formal Assessment:</b> Capstones Lesson quizzes Unit Test</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p>Distinguish between situations that can be modeled with linear functions and with exponential functions. <b>CC.9-12.F.LE.1</b></p> <ul style="list-style-type: none"> <li>a. Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. <b>CC.9-12.F.LE.1a</b></li> <li>b. Recognize situations in which one quantity changes at a constant rate per unit interval relative to another. <b>CC.9-12.F.LE.1b</b></li> <li>c. Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another. <b>CC.9-12.F.LE.1c</b></li> </ul> <p>Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table). <b>CC.9-12.F.LE.2</b></p> <p>Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function. <b>CC.9-12.F.LE.3</b></p> <p>For exponential models, express as a logarithm the solution to <math>ab^{ct} = d</math> where <math>a</math>, <math>c</math>, and <math>d</math> are numbers and the base <math>b</math> is 2, 10, or <math>e</math>; evaluate the logarithm using technology. <b>CC.9-12.F.LE.4</b></p> <p>Interpret the parameters in a linear or exponential function in terms of a context. <b>CC.9-12.F.LE.5</b></p>		<p>equations to model and solve real-life problems.</p> <p>Students will recognize the five most common types of models involving exponential and logarithmic functions.</p> <p>Students will use exponential growth and decay functions to model and solve real-life problems.</p> <p>Students will use Gaussian functions to model and solve real-life functions.</p> <p>Students will use logistic growth functions to model and solve real-life problems.</p> <p>Students will use logarithmic functions to model and solve real-life problems.</p>	
<p><b>Unit Eight: Exponential and Logarithmic Functions and Calculus</b>  <b>Timeline: 10 days</b></p>			
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics.</p>	<p>Exponential and Logarithmic functions are inverse</p>	<p><b><u>Learning Targets:</u></b></p>	<p><b><u>Formative:</u></b> Lesson Exercises</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p>However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ol>	<p>functions.</p> <p>The definition of the derivative and integral can be applied to logarithmic, exponential and transcendental functions.</p>	<p>Students will differentiate natural exponential functions.</p> <p>Students will integrate natural exponential functions.</p> <p>Students will find derivatives of functions involving the natural logarithmic function.</p> <p>Students will use logarithms as an aid in differentiating non logarithmic functions.</p> <p>Students will find derivatives of exponential and logarithmic functions in bases other than <math>e</math>.</p> <p>Students will use the Log Rule For Integration to integrate a rational function.</p> <p>Students will use separation of variables to solve a simple differential equation.</p> <p>Students will use exponential functions to model growth and decay in applied problems.</p>	<p>Review Exercises Textbook Chapter Test Problem Solving problems</p> <p><b>Formal Assessment:</b> Capstones Lesson quizzes Unit Test</p>
<p><b>Unit Nine: Trigonometric Functions</b> <b>Timeline:</b></p>			
<p>Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle. <b>CC.9-12.F.TF.1</b></p> <p>Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle. <b>CC.9-12.F.TF.2</b></p> <p>(+) Use special triangles to determine geometrically the values of sine, cosine, tangent for <math>\pi/3</math>, <math>\pi/4</math> and <math>\pi/6</math>,</p>	<p>Understand how the concept of function can be used to interpret, analyze and model functions that emerge from contexts including those contexts that are purely mathematical.</p> <p>Similarity transformations (rigid motions followed by dilations) define similarity in</p>	<p><b>Essential Questions:</b></p> <p>How can angles be described, radian measures be used, and degree measures be used?</p> <p>How can trigonometric functions be evaluate using the unit circle?</p> <p>How can trigonometric functions be evaluated for acute angles and how can fundamental trigonometric identities be used?</p> <p>How can reference angles be used to evaluate trigonometric functions of any angle?</p>	<p><b>Formative:</b> Lesson Exercises Review Exercises Textbook Chapter Test Problem Solving problems</p> <p><b>Summative Assessment:</b> Capstones Lesson quizzes Unit Test</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p>and use the unit circle to express the values of sine, cosine, and tangent for <math>\pi-x</math>, <math>\pi+x</math>, and <math>2\pi-x</math> in terms of their values for <math>x</math>, where <math>x</math> is any real number. <b>CC.9-12.F.TF.3</b></p> <p>(+) Use the unit circle to explain symmetry (odd and even) and periodicity of trigonometric functions. <b>CC.9-12.F.TF.4</b></p> <p>Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.* <b>CC.9-12.F.TF.5</b></p> <p>(+) Understand that restricting a trigonometric function to a domain on which it is always increasing or always decreasing allows its inverse to be constructed. <b>CC.9-12.F.TF.6</b></p> <p>(+) Use inverse functions to solve trigonometric equations that arise in modeling contexts; evaluate the solutions using technology, and interpret them in terms of the context.* <b>CC.9-12.F.TF.7</b></p> <p>Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles. <b>CC.9-12.G.SRT.6</b></p> <p>Explain and use the relationship between the sine and cosine of complementary angles. <b>CC.9-12.G.SRT.7</b></p> <p>Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.* <b>CC.9-12.G.SRT.8</b></p>	<p>the same way that rigid motions define congruence, thereby formalizing the similarity ideas of "same shape" and "scale factor" developed in the middle grades.</p> <p>These transformations lead to the criterion for triangle similarity that two pairs of corresponding angles are congruent.</p> <p>The definition of trigonometric ratios is not only useful in solving right triangle problems but can also be applied to general triangles.</p>	<p>How can the graphs of sine and cosine be sketched?</p> <p>How can the graphs of tangent, cotangent, secant, and cosecant be sketched?</p> <p>How can inverse trigonometric functions be evaluated?</p> <p>How are real-life problems involving right triangles, directional bearings, and harmonic motion solved?</p> <p><b><u>Learning Targets:</u></b></p> <p>Students will describe angles.</p> <p>Students will use radian measure.</p> <p>Students will use degree measure.</p> <p>Students will use angles to model and solve real-life problems.</p> <p>Students will identify a unit circle and describe its relationship to real numbers.</p> <p>Students will evaluate trigonometric functions using the unit circle.</p> <p>Students will use the domain and period to evaluate sine and cosine functions.</p> <p>Students will use a calculator to evaluate trigonometric functions.</p> <p>Students will evaluate trigonometric functions of acute angles.</p>	

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
		<p>Students will use fundamental trigonometric identities.</p> <p>Students will use trigonometric functions to model and solve real-life problems.</p> <p>Students will evaluate trigonometric functions of any angle.</p> <p>Students will use reference angles to evaluate trigonometric functions.</p> <p>Students will sketch the graphs of basic sine and cosine functions.</p> <p>Students will use amplitude and period to help sketch the graphs of sine and cosine functions.</p> <p>Students will sketch translations of the graphs of sine and cosine functions.</p> <p>Students will use sine and cosine functions to model real-life data.</p> <p>Students will sketch the graphs of tangent functions.</p> <p>Students will sketch the graphs of cotangent functions.</p> <p>Students will sketch the graphs of secant and cosecant functions.</p> <p>Students will sketch the graphs of damped trigonometric functions.</p> <p>Students will evaluate and graph the inverse</p>	

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
		<p>sine function.</p> <p>Students will evaluate and graph the other inverse trigonometric functions.</p> <p>Students will evaluate and graph the compositions of trigonometric functions.</p> <p>Students will solve real-life problems involving right triangles.</p> <p>Students will solve real-life problems involving directional bearings.</p> <p>Students will solve real-life problems involving harmonic motion.</p>	
<p><b>Unit Ten: Analytic Trigonometry</b>  <b>Timeline: 10 days</b></p>			
<p>Prove the Pythagorean identity <math>\sin^2(\theta) + \cos^2(\theta) = 1</math> and use it to find <math>\sin(\theta)</math>, <math>\cos(\theta)</math>, or <math>\tan(\theta)</math> given <math>\sin(\theta)</math>, <math>\cos(\theta)</math>, or <math>\tan(\theta)</math> and the quadrant of the angle. <b>CC.9-12.F.TF.8</b></p> <p>(+) Prove the addition and subtraction formulas for sine, cosine, and tangent and use them to solve problems. <b>CC.9-12.F.TF.9</b></p>	<p>The connection between extending the domain of trigonometric functions using the unit circle and graphing trigonometric functions in the Cartesian coordinate system to model periodic phenomena across the extended domain.</p> <p>That the graph of a function is a useful way of visualizing the relationship of the function models, and manipulating a mathematical expression for a function can throw light on the function's properties (amplitude, frequency, and midline).</p>	<p><b><u>Learning Targets:</u></b></p> <p>Students will recognize and write the fundamental trigonometric identities.</p> <p>Students will use the fundamental trigonometric identities to evaluate trigonometric functions, simplify trigonometric expressions, and rewrite trigonometric expressions.</p> <p>Students will verify trigonometric identities.</p> <p>Students will use standard algebraic techniques to solve trigonometric equations.</p> <p>Students will solve trigonometric equations of quadratic type.</p> <p>Students will solve trigonometric equations involving multiple angles.</p>	<p><b><u>Formative:</u></b>  Lesson Exercises  Review Exercises  Textbook Chapter Test  Problem Solving problems</p> <p><b><u>Summative Assessment:</u></b>  Capstones  Lesson quizzes  Unit Test</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
		<p>Students will use inverse trigonometric functions to solve trigonometric equations.</p> <p>Students will use sum and difference formulas to evaluate trigonometric functions, verify identities, and solve trigonometric equations.</p> <p>Students will use multiple-angle formulas to rewrite and evaluate trigonometric functions.</p> <p>Students will use power-reducing formulas to rewrite and evaluate trigonometric functions.</p> <p>Students will use half-angle formulas to rewrite and evaluate trigonometric functions.</p> <p>Students will use product-to-sum and sum-to-product formulas to rewrite and evaluate trigonometric functions.</p> <p>Students will use trigonometric formulas to rewrite real-life models.</p>	
<p><b>Unit Eleven: Trigonometric Functions and Calculus</b>  <b>Timeline: 10 days</b></p>			
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ol>	<p>Fundamental trigonometric identities can be used to simplify trigonometric expressions.</p> <p>Finding the derivative of a function may require the use of several rules, including rules for: sums, products, quotients, powers, exponentials, logarithms, trigonometric and inverse trigonometric functions, and the chain rule.</p>	<p><b><u>Learning Targets:</u></b></p> <p>Students will determine the limits of trigonometric functions.</p> <p>Students will find and use the derivatives of the sine and cosine functions.</p> <p>Students will find and use the derivatives of other trigonometric functions.</p> <p>Students will apply the First Derivative Test to find the minima and maxima of a function.</p>	<p><b><u>Formative:</u></b>  Lesson Exercises  Review Exercises  Textbook Chapter Test  Problem Solving problems</p> <p><b><u>Summative Assessment:</u></b>  Capstones  Lesson quizzes  Unit Test</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
		<p>Students will integrate trigonometric functions using trigonometric identities and <math>u</math>-substitution.</p> <p>Students will use integrals to find the average value of a function.</p> <p>Students will differentiate an inverse trigonometric function.</p> <p>Students will review the basic differentiation rules for elementary functions.</p> <p>Students will integrate functions whose antiderivatives involve inverse trigonometric functions.</p> <p>Students will use the method of completing the square to integrate a function.</p> <p>Students will review the basic integration rules involving elementary functions.</p> <p>Students will develop properties of hyperbolic functions.</p> <p>Students will differentiate and integrate hyperbolic functions.</p> <p>Students will develop properties of inverse hyperbolic functions.</p> <p>Students will differentiate and integrate functions involving inverse hyperbolic functions.</p>	

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<b>Unit Twelve: Topics in Analytic Geometry</b> <b>Timeline: 12 days</b>			
<p>(+) Derive the equations of ellipses and hyperbolas given the foci, using the fact that the sum or difference of distances from the foci is constant. <b>CC.9-12.G.GPE.3</b></p>	<p>Analytic geometry connects algebra and geometry, resulting in powerful methods of analysis and problem solving.</p> <p>Just as the number line associates numbers with locations in one dimension, a pair of perpendicular axes associates pairs of numbers with locations in two dimensions.</p> <p>This correspondence between numerical coordinates and geometric points allows methods from algebra to be applied to geometry and vice versa</p> <p>Geometric shapes can be described by equations, making algebraic manipulation into a tool for geometric understanding, modeling, and proof.</p>	<p><b><u>Learning Targets:</u></b></p> <p>Students will recognize a conic as the intersection of a plane and double-napped cone.</p> <p>Students will write equations of parabolas in standard form and graph parabolas.</p> <p>Students will use the reflective property of parabolas to solve real-life problems.</p> <p>Students will write equations of ellipses in standard form and graph ellipses.</p> <p>Students will use implicit differentiation to find the slope of a line tangent to an ellipse.</p> <p>Students will use properties of ellipses to model and solve real-life problems.</p> <p>Students will find eccentricities of ellipses.</p> <p>Students will write equations of hyperbolas in standard form.</p> <p>Students will find asymptotes of and graph hyperbolas.</p> <p>Students will use implicit differentiation to find the slope of a line tangent to a hyperbola.</p> <p>Students will use properties of hyperbolas to solve real-life problems.</p> <p>Students will classify conics from their general equations.</p>	<p><b><u>Formative:</u></b></p> <p>Lesson Exercises  Review Exercises  Textbook Chapter Test  Problem Solving problems</p> <p><b><u>Summative Assessment:</u></b></p> <p>Capstones  Lesson quizzes  Unit Test</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
		<p>Students will evaluate sets of parametric equations for given values of the parameter.</p> <p>Students will sketch curves that are represented by sets of parametric equations.</p> <p>Students will rewrite sets of parametric equations as single rectangular equations by eliminating the parameter.</p> <p>Students will find sets of parametric equations for graphs.</p> <p>Students will find the slope of a tangent line to a curve given by a set of parametric equations.</p> <p>Students will understand the polar coordinate system.</p> <p>Students will rewrite rectangular coordinates and equations in polar form and vice versa.</p> <p>Students will find the slope of a tangent line to a polar graph.</p> <p>Students will graph polar equations by point plotting.</p> <p>Students will use symmetry, zeros and maximum <math>r</math>-values to sketch graphs of polar equations.</p> <p>Students will recognize special polar graphs.</p> <p>Students will define conic in terms of eccentricity.</p> <p>Students will write and graph equations of conic in polar form.</p>	

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
		Students will use equations of conic in polar form to model real-life problems.	
<b>Unit Thirteen: Additional Topics in Trigonometry</b> <b>Timeline: 12 days</b>			
<p>(+) Recognize vector quantities as having both magnitude and direction. Represent vector quantities by directed line segments, and use appropriate symbols for vectors and their magnitudes (e.g., <math>\mathbf{v}</math>, <math> \mathbf{v} </math>, <math>\ \mathbf{v}\ </math>, <math>v</math>). <b>CC.9-12.N.VM.1</b></p> <p>(+) Find the components of a vector by subtracting the coordinates of an initial point from the coordinates of a terminal point. <b>CC.9-12.N.VM.2</b></p> <p>(+) Solve problems involving velocity and other quantities that can be represented by vectors. <b>CC.9-12.N.VM.3</b></p> <p>(+) Add and subtract vectors. <b>CC.9-12.N.VM.4</b></p> <p>a. Add vectors end-to-end, component-wise, and by the parallelogram rule. Understand that the magnitude of a sum of two vectors is typically not the sum of the magnitudes. <b>CC.9-12.N.VM.4a</b></p> <p>b. Given two vectors in magnitude and direction form, determine the magnitude and direction of their sum. <b>CC.9-12.N.VM.4b</b></p> <p>c. Understand vector subtraction <math>\mathbf{v} - \mathbf{w}</math> as <math>\mathbf{v} + (-\mathbf{w})</math>, where <math>-\mathbf{w}</math> is the additive inverse of <math>\mathbf{w}</math>, with the same magnitude as <math>\mathbf{w}</math> and pointing in the opposite direction. Represent vector subtraction graphically by connecting the tips in the appropriate order, and perform vector subtraction component-wise. <b>CC.9-12.N.VM.4c</b></p> <p>(+) Multiply a vector by a scalar. <b>CC.9-12.N.VM.5</b></p> <p>a. Represent scalar multiplication graphically by scaling vectors and possibly reversing their direction; perform scalar multiplication component-wise, e.g., as <math>c(v_x, v_y) = (cv_x, cv_y)</math>.</p>	<p>Similarity transformations (rigid motions followed by dilations) define similarity in the same way that rigid motions define congruence, thereby formalizing the similarity ideas of "same shape" and "scale factor" developed in the middle grades.</p> <p>These transformations lead to the criterion for triangle similarity that two pairs of corresponding angles are congruent.</p> <p>The definition of trigonometric ratios is not only useful in solving right triangle problems but can also be applied to general triangles.</p>	<p><b>Learning Targets:</b></p> <p>Students will use the Law of Sines to solve oblique triangles (AAS, ASA, or SSA).</p> <p>Students will find the areas of oblique triangles.</p> <p>Students will use the Law of Sines to model and solve real-life problems.</p> <p>Students will use the Law of Cosines to solve oblique triangles (SSS or SAS).</p> <p>Students will use Heron's Area Formula to find the area of a triangle.</p> <p>Students will use the Law of Cosines to model and solve real-life problems.</p> <p>Students will represent vectors as directed line segments.</p> <p>Students will write the component forms of vectors.</p> <p>Students will perform basic vector operations and represent them graphically.</p> <p>Students will write vectors as linear combinations of unit vectors.</p> <p>Students will find the direction angles of vectors.</p>	<p><b>Formative:</b></p> <p>Lesson Exercises Review Exercises Textbook Chapter Test Problem Solving problems</p> <p><b>Formal Assessment:</b></p> <p>Capstones Lesson quizzes Unit Test</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p><b>CC.9-12.N.VM.5a</b></p> <p>b. Compute the magnitude of a scalar multiple <math>c\mathbf{v}</math> using <math>\ c\mathbf{v}\  =  c \mathbf{v}</math>. Compute the direction of <math>c\mathbf{v}</math> knowing that when <math> c \neq 0</math>, the direction of <math>c\mathbf{v}</math> is either along <math>\mathbf{v}</math> (for <math>c &gt; 0</math>) or against <math>\mathbf{v}</math> (for <math>c &lt; 0</math>).</p> <p><b>CC.9-12.N.VM.5b</b></p> <p>(+) Prove the Laws of Sines and Cosines and use them to solve problems. <b>CC.9-12.G.SRT.10</b></p> <p>(+) Understand and apply the Law of Sines and the Law of Cosines to find unknown measurements in right and non-right triangles (e.g., surveying problems, resultant forces). <b>CC.9-12.G.SRT.11</b></p>		<p>Students will use vectors to model and solve real-life problems.</p> <p>Students will find the dot product of two vectors and use the properties of the dot product.</p> <p>Students will find the angle between two vectors and determine whether two vectors are orthogonal.</p> <p>Students will write a vector as the sum of two vector components.</p> <p>Students will use vectors to find the work done by a force.</p> <p>Students will plot complex numbers in the complex plane and find absolute values or complex numbers.</p> <p>Students will write the trigonometric forms of complex numbers.</p> <p>Students will multiply and divide complex numbers written in trigonometric form.</p> <p>Students will use DeMoivre's Theorem to find powers of complex numbers.</p> <p>Students will find <math>n</math>th roots of complex numbers.</p>	
<p><b>Unit Fourteen: Systems of Equations and Matrices (WEB)</b>  <b>Timeline: 12 days</b></p>			
<p>(+) Use matrices to represent and manipulate data, e.g., to represent payoffs or incidence relationships in a network. <b>CC.9-12.N.VM.6</b></p>	<p>Algebraic manipulations used to solve equations/systems are governed by the underlying properties and structure of</p>	<p><b><u>Learning Targets:</u></b></p> <p>Students will write, graph, and solve systems of linear equations in two variable</p>	<p><b><u>Formative:</u></b>  Lesson Exercises  Review Exercises  Textbook Chapter Test</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p>(+) Multiply matrices by scalars to produce new matrices, e.g., as when all of the payoffs in a game are doubled. <b>CC.9-12.N.VM.7</b></p> <p>(+) Add, subtract, and multiply matrices of appropriate dimensions. <b>CC.9-12.N.VM.8</b></p> <p>(+) Understand that, unlike multiplication of numbers, matrix multiplication for square matrices is not a commutative operation, but still satisfies the associative and distributive properties. <b>CC.9-12.N.VM.9</b></p> <p>(+) Understand that the zero and identity matrices play a role in matrix addition and multiplication similar to the role of 0 and 1 in the real numbers. The determinant of a square matrix is nonzero if and only if the matrix has a multiplicative inverse. <b>CC.9-12.N.VM.10</b></p> <p>(+) Multiply a vector (regarded as a matrix with one column) by a matrix of suitable dimensions to produce another vector. Work with matrices as transformations of vectors. <b>CC.9-12.N.VM.11</b></p> <p>(+) Work with <math>2 \times 2</math> matrices as transformations of the plane, and interpret the absolute value of the determinant in terms of area. <b>CC.9-12.N.VM.12</b></p> <p>Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. <b>CC.9-12.A.REI.5</b></p> <p>Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. <b>CC.9-12.A.REI.6</b></p> <p>Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. <i>For example, find the points of intersection between the line <math>y = -3x</math> and the circle <math>x^2 + y^2 = 3</math>.</i> <b>CC.9-</b></p>	<p>number systems and the conventions of algebraic notation.</p>	<p>Students will write, graph, and solve multivariable linear systems</p> <p>Students will write, graph, and solve systems of inequalities</p> <p>Students will use matrices to model and solve systems of equations</p> <p>Students will operate on matrices</p> <p>Students will find and use the inverse of a square matrix</p> <p>Students will find and use the determinant of a square matrix</p> <p>Students will use Cramer’s rule</p>	<p>Problem Solving problems</p> <p><u>Summative Assessment:</u> Capstones Lesson quizzes Unit Test</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p><b>12.A.REI.7</b></p> <p>(+) Represent a system of linear equations as a single matrix equation in a vector variable. <b>CC.9-12.A.REI.8</b></p> <p>(+) Find the inverse of a matrix if it exists and use it to solve systems of linear equations (using technology for matrices of dimension <math>3 \times 3</math> or greater). <b>CC.9-12.A.REI.9</b></p> <p>Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). <b>CC.9-12.A.REI.10</b></p> <p>Explain why the <math>x</math>-coordinates of the points where the graphs of the equations <math>y = f(x)</math> and <math>y = g(x)</math> intersect are the solutions of the equation <math>f(x) = g(x)</math>; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where <math>f(x)</math> and/or <math>g(x)</math> are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.* <b>CC.9-12.A.REI.11</b></p> <p>Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes. <b>CC.9-12.A.REI.12</b></p>			

# Curriculum Framework for Calculus

School: Newark Charter School

Curricular Tool: Calculus 9<sup>th</sup> Ed. (Larson & Edwards)

Grade: 12

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<b>Unit One: Limits and Their Properties</b> <b>Timeline : 12 days</b>			
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ol>	<p>Introduction/Preview of Calculus</p> <p>Finding limits</p> <p>Evaluating limits analytically</p> <p>Continuity and one-sided limits</p> <p>Infinite limits</p>	<p><b><u>Learning Targets:</u></b></p> <p>How Calculus Compares with precalculus</p> <p>How Tangent line and area problems are basic to Calculus</p> <p>How to find limits graphically and numerically upon existence</p> <p>How to evaluate limits analytically: using properties of limits, dividing out, rationalizing techniques, and the Squeeze Theorem</p> <p>How to determine continuity at a point and on an open interval, and how to determine one-sided limits</p> <p>Understand and use the Intermediate Value Theorem</p> <p>How to determine infinite limits and find vertical asymptotes</p>	<p><b><u>Informal:</u></b></p> <p>Lesson Exercises</p> <p>Review Exercises</p> <p>Textbook Chapter Test</p> <p>Problem Solving problems</p> <p><b><u>Formal Assessment:</u></b></p> <p>Capstones</p> <p>Lesson quizzes</p> <p>Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<b>Unit Two: Differentiation</b> <b>Timeline: 15 days</b>			
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ol>	<p>The derivative and the tangent line</p> <p>Basic differentiation rules and rates of change</p> <p>Product and quotient rules and high-order derivatives</p> <p>The chain rule</p> <p>Implicit differentiation</p> <p>Related rates</p>	<p><b><u>Learning Targets:</u></b></p> <p>How to find the derivative of a function using the limit definition and understand the relationship between differentiability and continuity</p> <p>How to find the derivative of a function using basic differentiation rules</p> <p>How to find the derivative of a function using the Product Rule and the Quotient Rule</p> <p>How to find the derivative of a function using the Chain Rule and the General Power Rule</p> <p>How to find the derivative of a function using implicit differentiation</p> <p>How to find a related rate</p>	<p><b><u>Informal:</u></b></p> <p>Lesson Exercises  Review Exercises  Textbook Chapter Test  Problem Solving problems</p> <p><b><u>Formal Assessment:</u></b></p> <p>Capstones  Lesson quizzes  Unit Test</p>
<b>Unit Three: Applications of Differentiation</b> <b>Timeline: 18 days</b>			
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and</li> </ol>	<p>Extrema on an Interval</p> <p>Rolle's Theorem and the Mean Value Theorem</p> <p>Increasing and Decreasing Functions and the First Derivative test</p> <p>Concavity and the Second Derivative test</p>	<p><b><u>Learning Targets:</u></b></p> <p>How to use a derivative to locate the minimum and maximum values of a function on a closed interval</p> <p>How numerous results in this chapter depend on two important theorems called Rolle's Theorem and the Mean Value Theorem</p>	<p><b><u>Informal:</u></b></p> <p>Lesson Exercises  Review Exercises  Textbook Chapter Test  Problem Solving problems</p> <p><b><u>Formal Assessment:</u></b></p> <p>Capstones</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>persevere in solving them.</p> <ol style="list-style-type: none"> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ol>	<p>Limits an Infinity</p> <p>A summary of the curve Sketching</p> <p>Optimization problems</p> <p>Newton’s Method</p> <p>Differentials</p>	<p>How to use the first derivative to determine whether a function is increasing or decreasing</p> <p>How to use the second derivative to determine whether the graph of a function is concave upward or concave downward</p> <p>How to find horizontal asymptotes of the graph of a function</p> <p>How to graph functions using the techniques from Chapters P-3</p> <p>How to solve optimization problems</p> <p>How to use approximation techniques to solve problems</p>	<p>Lesson quizzes</p> <p>Unit Test</p>
<p><b>Unit Four: Integration</b>  <b>Timeline: 15 days</b></p>			
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> </ol>	<p>Antiderivatives and Indefinite Integration</p> <p>Area</p> <p>Riemann Sums and Definite Integrals</p> <p>The Fundamental Theorem of Calculus</p> <p>Integration by Substitution</p> <p>Numerical Integration</p>	<p><b><u>Learning Targets:</u></b></p> <p>How to evaluate indefinite integrals using basic rules</p> <p>How to evaluate a sum and approximate the area of a plane region</p> <p>How to evaluate a definite integral using a limit</p> <p>How to evaluate a definite integral using Fundamental Theorem of Calculus</p> <p>How to evaluate different types of</p>	<p><b><u>Informal:</u></b></p> <p>Lesson Exercises</p> <p>Review Exercises</p> <p>Textbook Chapter Test</p> <p>Problem Solving problems</p> <p><b><u>Formal Assessment:</u></b></p> <p>Capstones</p> <p>Lesson quizzes</p> <p>Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.		definite and indefinite integrals using a variety of methods  How to approximate a definite integral using the Trapezoidal Rule and Simpson's Rule	
<b>Unit Five: Logarithmic, Exponential, and Other Transcendental Functions</b> <b>Timeline: 15 days</b>			
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ol>	<p>The Natural Logarithmic Function:            Differentiation and Integration</p> <p>Inverse Functions</p> <p>Exponential Functions: Differentiation and Integration</p> <p>Bases Other than e and Applications</p> <p>Inverse Trigonometric Functions:            Differentiation and Integration</p> <p>Hyperbolic Functions</p>	<p><b>Learning Targets:</b></p> <p>The properties of the natural logarithmic function. How to find the derivative and antiderivative of the natural logarithmic function</p> <p>How to determine whether a function has an inverse function</p> <p>The properties of the natural exponential function. How to find the derivative and antiderivative of the natural exponential function</p> <p>The properties, derivatives, and antiderivatives of logarithmic and exponential functions that have bases other than e</p> <p>The properties of inverse trigonometric functions. How to find the derivatives and antiderivatives of inverse trigonometric functions</p> <p>The properties of hyperbolic functions. How to find the derivative and antiderivative of hyperbolic functions</p>	<p><b>Informal:</b></p> <p>Lesson Exercises            Review Exercises            Textbook Chapter Test            Problem Solving problems</p> <p><b>Formal Assessment:</b></p> <p>Capstones            Lesson quizzes            Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<b>Unit Six: Differential Equations</b> <b>Timeline: 12 days</b>			
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ol>	<p>Slope fields and Euler’s method</p> <p>Differential Equations: Growth and Decay</p> <p>Separation of Variables and the Logistics Equation</p> <p>First-Order Linear Differential Equations</p>	<p><b><u>Learning Targets:</u></b></p> <p>How to sketch a slope field of differential equations and find a particular solution</p> <p>How to use an exponential function to model growth and decay</p> <p>How to use separation of variables to solve a differential equation</p> <p>How to solve a first-order linear differential equation and a Bernoulli differential equation</p>	<p><b><u>Informal:</u></b></p> <p>Lesson Exercises  Review Exercises  Textbook Chapter Test  Problem Solving problems</p> <p><b><u>Formal Assessment:</u></b></p> <p>Capstones  Lesson quizzes  Unit Test</p>
<b>Unit Seven: Applications of Integration</b> <b>Timeline: 15 days</b>			
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and</li> </ol>	<p>Area of region Between Two Curves</p> <p>Volume: The Disk Method and Shell Method</p> <p>Arc Length and Surfaces of Revolution</p> <p>Work</p> <p>Moments, Centers of Mass, and Centroids</p> <p>Fluid pressure and force</p>	<p><b><u>Learning Targets:</u></b></p> <p>How to use a definite integral to find the area of a region bounded by two curves</p> <p>How to find the volume of a solid of revolution by the disk and shell method</p>	<p><b><u>Informal:</u></b></p> <p>Lesson Exercises  Review Exercises  Textbook Chapter Test  Problem Solving problems</p> <p><b><u>Formal Assessment:</u></b></p> <p>Capstones</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>persevere in solving them.</p> <ol style="list-style-type: none"> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ol>		<p>How to find the length of a curve and the surface area of a surface of revolution</p> <p>How to find the work done by a constant force and by variable force</p> <p>How to find centers of mass and centroids</p> <p>How to find fluid pressure and fluid force</p>	<p>Lesson quizzes Unit Test</p>
<p><b>Unit Eight Integration Techniques, L'Hopital Rule, and Improper Integrals</b> <b>Timeline: 18 days</b></p>			
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> </ol>	<p>Basic Integration Rules</p> <p>Integration by Parts</p> <p>Trigonometric Integrals</p> <p>Trigonometric Substitution</p> <p>Partial Fractions</p> <p>Integration by Tables and other Integration Techniques</p> <p>Indeterminate Forms and L'Hopital Rule</p> <p>Improper Integrals</p>	<p><b><u>Learning Targets:</u></b></p> <p>How to fit an integrand to one of the basic integration rules</p> <p>How to find an antiderivative using integration by parts</p> <p>How to evaluate trigonometric integrals</p> <p>How to use trigonometric substitution to evaluate an integral</p> <p>How to use partial fraction decomposition to integrate rational functions</p> <p>How to evaluate an indefinite integral using a table of integrals and using reduction formulas</p>	<p><b><u>Informal:</u></b></p> <p>Lesson Exercises Review Exercises Textbook Chapter Test Problem Solving problems</p> <p><b><u>Formal Assessment:</u></b></p> <p>Capstones Lesson quizzes Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
8. Look for and express regularity in repeated reasoning.		How to apply L'Hopital Rule to evaluate a limit  How to evaluate an improper integral	
<b>Unit Nine: Infinite Series</b> <b>Timeline: 18 days</b>			
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ol>	<p>Sequences Series and Convergence The Integral Test and p-Series Comparison of Series Alternating series The Ratio and Root tests Taylor Polynomials and Approximations Power Series Representation of Functions by Power Series Taylor and Maclaurin Series</p>	<p><b>Learning Targets:</b> How to determine whether a sequence converges or diverges  How to determine whether an infinite series converges or diverges  How to find Taylor and Maclaurin polynomial approximation of elementary functions  How to find the radius and interval of convergence of a power series and to differentiate and integrate power series  How to represent functions by power series  How to find a Taylor and Maclaurin series for a function</p>	<p><b>Informal:</b> Lesson Exercises Review Exercises Textbook Chapter Test Problem Solving problems</p> <p><b>Formal Assessment:</b> Capstones Lesson quizzes Unit Test</p>
<b>Unit Ten: Conics, Parametric Equations, and Polar Coordinates</b> <b>Timeline: 12 days</b>			
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will</p>	<p>Conics and Calculus Plane Curves and Parametric Equations</p>	<p><b>Learning Targets:</b> How to analyze and write equations of a parabola, an ellipse, and a hyperbola</p>	<p><b>Informal:</b> Lesson Exercises Review Exercises Textbook Chapter Test Problem Solving problems</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ol>	<p>Parametric Equations and Calculus</p> <p>Polar Coordinates and Polar Graphs</p> <p>Area and Arc Length in Polar Coordinates</p> <p>Polar Equations of Conics and Kepler's Laws</p>	<p>How to sketch a curve represented by parametric equations</p> <p>How to use a set of parametric equations to find the slope of a tangent line to a curve and the arc length of a curve</p> <p>How to sketch the graph of an equation in polar form, find the slope of a tangent line to a polar graph, and identify special polar graphs</p> <p>How to find the area of a region bounded by a polar graph and find the arc length of a polar graph</p> <p>How to analyze and write a polar equation of a conic</p>	<p><b><u>Formal Assessment:</u></b></p> <p>Capstones</p> <p>Lesson quizzes</p> <p>Unit Test</p>
<p><b>Unit Eleven Vectors and the Geometry of Space</b>  <b>Timeline: 12 days</b></p>			
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools</li> </ol>	<p>Vectors in the Plane</p> <p>Space Coordinates and Vectors in Space</p> <p>The Dot Product of Two Vectors</p> <p>The Cross Product of Two vectors in Space</p> <p>Lines and Planes in Space</p> <p>Surfaces in Space</p> <p>Cylindrical and Spherical Coordinates</p>	<p><b><u>Learning Targets:</u></b></p> <p>How to write vectors, perform basic vector operations, and represent vectors graphically</p> <p>How to plot points in a three-dimensional coordinate system and analyze vectors in space</p> <p>How to find the dot product of two vectors (in plane or in space)</p> <p>How to find the cross product of two vectors (in space)</p> <p>How to find equations of lines and planes in space, and how to sketch</p>	<p><b><u>Informal:</u></b></p> <p>Lesson Exercises</p> <p>Review Exercises</p> <p>Textbook Chapter Test</p> <p>Problem Solving problems</p> <p><b><u>Formal Assessment:</u></b></p> <p>Capstones</p> <p>Lesson quizzes</p> <p>Unit Test</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.		their graphs  How to recognize and write equations of cylindrical and quadric surfaces and of surfaces of revolution  How to use cylindrical and spherical coordinates to represent surfaces in space	
<b>Unit Twelve: Vector-Valued Functions</b> <b>Timeline: 10 days</b>			
This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.  1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	Vector-Valued Functions  Differentiation and Integration of Vector-Valued Functions  Velocity and Acceleration  Tangent Vectors and Normal Vectors  Arc Length and Curvature	<u><b>Learning Targets:</b></u>  How to analyze and sketch a space curve represented by a vector-valued function.  How apply the concepts of limits and continuity to vector-valued functions  How to differentiate and integrate vector-valued functions  How to describe the velocity and acceleration associated with a vector-value function  How to use a vector-valued function to analyze projectile motion  How to find tangent vectors and normal vectors  How to find the arc length and curvature of a curve	<u><b>Informal:</b></u> Lesson Exercises Review Exercises Textbook Chapter Test Problem Solving problems  <u><b>Formal Assessment:</b></u> Capstones Lesson quizzes Unit Test
<b>Unit Thirteen: Functions of Several Variables</b> <b>Timeline: 18 days</b>			

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ol>	<p>Introduction to Functions of Several Variables</p> <p>Limits and Continuity</p> <p>Partial Derivatives</p> <p>Differentials</p> <p>Chain Rules for Functions of Several Variables</p> <p>Directional Derivatives and Gradients</p> <p>Tangent Planes and Normal Lines</p> <p>Extrema of Functions of Two Variable</p> <p>And their Applications</p> <p>Langrange Multipliers</p>	<p><b><u>Learning Targets:</u></b></p> <p>How to sketch a graph, level curves, and level surfaces</p> <p>How to find a limit and determine continuity</p> <p>How to find and use a partial derivative</p> <p>How to find and use a total differential and determine differentiability</p> <p>How to the Chain Rule and find a partial derivative implicitly</p> <p>How to find and use a directional derivative and a gradient</p> <p>How to find an equation of a tangent plane and an equation of a normal line to a surface</p> <p>How to find the angle of inclination of a plane</p> <p>How to find absolute and relative extrema</p> <p>How to solve an optimization problem including constrained optimization using Lagrange multiplier</p> <p>How to the method of least squares</p>	<p><b><u>Informal:</u></b></p> <p>Lesson Exercises</p> <p>Review Exercises</p> <p>Textbook Chapter Test</p> <p>Problem Solving problems</p> <p><b><u>Formal Assessment:</u></b></p> <p>Capstones</p> <p>Lesson quizzes</p> <p>Unit Test</p>
<p><b>Unit Fourteen: Multiple Integrations</b>  <b>Timeline: 18 days</b></p>			
<p>This unit goes beyond the level of rigor detailed in the Common</p>	<p>Iterated Integrals and Area in the Plane</p>	<p><b><u>Learning Targets:</u></b></p> <p>How to evaluate an iterated integral</p>	<p><b><u>Informal:</u></b></p> <p>Lesson Exercises</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ol>	<p>Double Integrals and Volume</p> <p>Change of Variables: Polar Coordinates</p> <p>Center of Mass and Moments of Inertia</p> <p>Surface Area</p> <p>Triple Integrals and Applications</p> <p>Triple Integrals in Cylindrical and Spherical Coordinates</p> <p>Change of Variables: Jacobians</p>	<p>and find the area of a plane region</p> <p>How to use a double integral to find the volume of a solid region</p> <p>How to write and evaluate double integrals in polar coordinates</p> <p>How to find the mass of a planar lamina, the center of mass of a planar lamina, and moments of inertia using double integrals</p> <p>How to use a double integral to find the area of a surface</p> <p>How to use a triple integral to find the volume, center of mass, and moments of inertia of a solid region</p> <p>How to write and evaluate triple integrals in cylindrical and spherical coordinates</p> <p>How to use a Jacobian to change variables in double integral</p>	<p>Review Exercises</p> <p>Textbook Chapter Test</p> <p>Problem Solving problems</p> <p><b><u>Formal Assessment:</u></b></p> <p>Capstones</p> <p>Lesson quizzes</p> <p>Unit Test</p>
<p><b>Unit Fifteen: Vector Analysis</b>  <b>Timeline: 18 days</b></p>			
<p>This unit goes beyond the level of rigor detailed in the Common Core State Standards for Mathematics. However, in teaching this unit the teacher will employ the mathematics practices contained within the standards.</p> <ol style="list-style-type: none"> <li>1. Make sense of problems and persevere in solving them.</li> </ol>	<p>Vector Fields</p> <p>Line Integrals</p> <p>Conservative Vector Fields and Independence of Path</p> <p>Greens' Theorem</p> <p>Parametric Surfaces</p>	<p><b><u>Learning Targets:</u></b></p> <p>How to sketch a vector field, determine whether a vector field is conservative, find a potential functions, find curl, and find divergence</p> <p>How to find a piecewise smooth parametrization, write and evaluate a line integral, and use Green's</p>	<p><b><u>Informal:</u></b></p> <p>Lesson Exercises</p> <p>Review Exercises</p> <p>Textbook Chapter Test</p> <p>Problem Solving problems</p> <p><b><u>Formal Assessment:</u></b></p> <p>Capstones</p> <p>Lesson quizzes</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<ul style="list-style-type: none"> <li>2. Reason abstractly and quantitatively.</li> <li>3. Construct viable arguments and critique the reasoning of others.</li> <li>4. Model with mathematics.</li> <li>5. Use appropriate tools strategically.</li> <li>6. Attend to precision.</li> <li>7. Look for and make use of structure.</li> <li>8. Look for and express regularity in repeated reasoning.</li> </ul>	<p>Divergence Theorem</p> <p>Stokes's Theorem</p>	<p>Theorem</p> <p>How to use the Fundamental Theorem of Line Integrals, independence of path, and conservation of energy</p> <p>How to sketch a parametric surface, find a set of parametric equations to represent a surface, find a normal vector, find a tangent plane, and find the area of a parametric surface</p> <p>How to evaluate a surface integral, determine the orientation of a surface, evaluate a flux integral, and use the Divergence Theorem</p> <p>How to use Stokes's Theorem to evaluate a line integral or a surface integral and how to use curl to analyze the motion of a rotating liquid</p>	<p>Unit Test</p>

# Curriculum Framework for World Geography and Cultures

School: Newark Charter School

Curricular Tool: World Geography and Cultures - Glencoe

Grade: 9

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit One: The World</b> <b>Timeline : 6-7 classes</b>			
<p><b>Standard 1</b> – Students will develop a personal geographic framework, or “mental map,” and understand the uses of maps and other geographics [MAPS]</p> <p><b>1a:</b> Students will identify geographic patterns which emerge when collected data is mapped, and analyze mapped patterns through the application of such common geographic principles as</p> <ul style="list-style-type: none"> <li>-- Hierarchy (patterns at a detailed scale may be related to patterns at a more general scale)</li> <li>-- Accessibility (how easily one place can be reached from another)</li> <li>-- Diffusion (how people or things move in certain directions at certain speeds)</li> <li>-- Complimentarily (the mutual exchange of people or goods among places usually occurs over the shortest possible distances)</li> </ul> <p><b>1b:</b> Students will apply the analysis of mapped patterns to the solution of problems.</p> <p><b>Standard 2:</b> Students will develop a knowledge of the ways humans modify and respond to the natural environment [ENVIRONMENT].</p> <p><b>2 a:</b> Students will understand the Earth's physical environment as a set of</p>	<p>Geography is used to interpret the past, understand the present, and plan for the future.</p> <p>Physical processes shape Earth’s surface.</p> <p>Geographers study how people, places, and environments are distributed on Earth’s surface.</p> <p>The characteristics and distribution of human population affect human and physical systems.</p>	<p><b>Essential Questions:</b></p> <p>What skills do geography skills provide?</p> <p>What are the elements of geography?</p> <p>As a physical system, what makes Earth suitable for plant and animal life?</p> <p>How have internal and external forces shaped Earth’s surface?</p> <p>What physical process keeps Earth’s water constant?</p> <p>How does Earth’s position in relationship to the sun affect life on Earth?</p> <p>What factors can affect how climates are distributed on Earth’s surface?</p> <p>How do geographers classify Earth’s climate and vegetation?</p> <p>What factors influence population growth in a given</p>	<p><b>Suggested Formative Assessments:</b></p> <p>Visual Summary activities to help students synthesize major chapter themes.</p> <p>Critical thinking questions</p> <p>Document based questions</p> <p>Extension activities</p> <p>Geography online</p> <p>Participation in oral class discussions</p> <p>Case Study reviews</p> <p>Vocabulary Activities</p> <p><b>Suggested Summative Assessments</b></p> <p>Standardized test practice</p> <p>Chapter assessment</p> <p>Unit assessment</p> <p>Primary Source research and presentation of findings</p> <p>Content and presentation rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>interconnected systems (ecosystems) and the ways humans have perceived, reacted to, and changed environments at local to global scales</p> <p><b>Standard 3:</b> Students will develop an understanding of the diversity of human culture and the unique nature of places [PLACES].</p> <p><b>3a:</b> Students will understand the processes which result in distinctive cultures, economic activity, and settlement form in particular locations across the world.</p> <p><b>Standard 4:</b> Students will develop an understanding of the character and use of regions and the connections between and among them [REGIONS].</p> <p><b>4.a:</b> Students will apply knowledge of the types of regions and methods of drawing boundaries to interpret the Earth's changing complexity</p>		<p>area or region?</p> <p>How does the spatial interaction of cultures affect human systems? What types of human systems provide the power for groups of people to control Earth's surface?</p> <p>How does the availability and use of natural resources affect economic activities and the environment?</p> <p><b><u>Learning Targets:</u></b> Students will identify, interpret and analyze the physical processes that shape the Earth's surface.</p> <p>Students will determine the properties that influence human and physical systems.</p> <p>Students will understand how people, places and objects are positioned on Earth's surface.</p>	
<p><b>Unit Two: The United States and Canada</b> <b>Timeline: 5-6 classes</b></p>			
<p><b>Standard 1</b> – Students will develop a personal geographic framework, or “mental map,” and understand the uses of maps and other geographics [MAPS]</p> <p><b>1a:</b> Students will identify geographic patterns which emerge when collected data is mapped, and analyze mapped patterns through the</p>	<p>Geography and the environment play an important role in how a society is shaped over time.</p> <p>Certain processes, patterns and functions help determine where people settle.</p>	<p><b><u>Essential Questions:</u></b> How has physical geography affected the development of the United states and Canada?  What factors cause variations in climate in most of the United States and Canada?</p>	<p><b><u>Suggested Formative Assessments:</u></b> Visual Summary activities to help students synthesize major chapter themes. Critical thinking questions Document based questions Extension activities Geography online</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>application of such common geographic principles as</p> <ul style="list-style-type: none"> <li>-- Hierarchy (patterns at a detailed scale may be related to patterns at a more general scale)</li> <li>-- Accessibility (how easily one place can be reached from another)</li> <li>-- Diffusion (how people or things move in certain directions at certain speeds)</li> <li>-- Complimentarily (the mutual exchange of people or goods among places usually occurs over the shortest possible distances)</li> </ul> <p><b>1b:</b> Students will apply the analysis of mapped patterns to the solution of problems.</p> <p><b>Standard 2:</b> Students will develop a knowledge of the ways humans modify and respond to the natural environment [ENVIRONMENT].</p> <p><b>2 a:</b> Students will understand the Earth's physical environment as a set of interconnected systems (ecosystems) and the ways humans have perceived, reacted to, and changed environments at local to global scales</p> <p><b>Standard 3:</b> Students will develop an understanding of the diversity of human culture and the unique nature of places [PLACES].</p> <p><b>3a:</b> Students will understand the processes which result in distinctive cultures, economic activity, and settlement form in particular locations across the world.</p> <p><b>Standard 4:</b> Students will develop an</p>		<p>What are three factors that have influenced the cultural geography of the United States?</p> <p>How have immigration and physical geography influenced the cultural geography of Canada?</p> <p>How have the economics of the United States and Canada grown and changed according to where and how people live?</p> <p>How have human actions modified the environment in the United States and Canada?</p> <p><b><u>Learning Targets:</u></b> Students will understand how environmental processes play a role societal change.</p>	<p>Participation in oral class discussions Case Study reviews Vocabulary Activities</p> <p><b><u>Suggested Summative Assessments</u></b> Standardized test practice Chapter assessment Unit assessment Primary Source research and presentation of findings Content and presentation rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>understanding of the character and use of regions and the connections between and among them [REGIONS].</p> <p><b>4.a:</b>Students will apply knowledge of the types of regions and methods of drawing boundaries to interpret the Earth's changing complexity</p>			
<p><b>Unit Three: Latin America</b> <b>Timeline: 5-6 classes</b></p>			
<p><b>Standard 1</b> – Students will develop a personal geographic framework, or “mental map,” and understand the uses of maps and other geographics [MAPS]</p> <p><b>1a:</b> Students will identify geographic patterns which emerge when collected data is mapped, and analyze mapped patterns through the application of such common geographic principles as</p> <ul style="list-style-type: none"> <li>-- Hierarchy (patterns at a detailed scale may be related to patterns at a more general scale)</li> <li>-- Accessibility (how easily one place can be reached from another)</li> <li>-- Diffusion (how people or things move in certain directions at certain speeds)</li> <li>-- Complimentarily (the mutual exchange of people or goods among places usually occurs over the shortest possible distances)</li> </ul> <p><b>1b:</b> Students will apply the analysis of mapped patterns to the solution of problems.</p> <p><b>Standard 2:</b> Students will develop a knowledge of the ways humans modify and respond to the natural environment [ENVIRONMENT].</p>	<p>Certain processes, patterns and functions help determine where people settle.</p> <p>Places reflect the relationship between humans and the physical environment. Countries are affected by their relationship to each other.</p>	<p><b>Essential Questions:</b></p> <p>How has physical geography affected where people have settled in Latin America?</p> <p>How do location and landforms affect climate in Latin America?</p> <p>What groups have influenced the culture of Mexico?</p> <p>How might colonization and slavery influence the culture of a region?</p> <p>How have physical features influenced the culture of south America?</p> <p>How might a region expand its economic growth?</p> <p>How do human activities place stress on a region’s natural resources?</p>	<p><b>Suggested Formative Assessments:</b></p> <p>Visual Summary activities to help students synthesize major chapter themes.</p> <p>Critical thinking questions</p> <p>Document based questions</p> <p>Extension activities</p> <p>Geography online</p> <p>Participation in oral class discussions</p> <p>Case Study reviews</p> <p>Vocabulary Activities</p> <p><b>Suggested Summative Assessments</b></p> <p>Standardized test practice</p> <p>Chapter assessment</p> <p>Unit assessment</p> <p>Primary Source research and presentation of findings</p> <p>Content and presentation rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p><b>2 a:</b> Students will understand the Earth's physical environment as a set of interconnected systems (ecosystems) and the ways humans have perceived, reacted to, and changed environments at local to global scales</p> <p><b>Standard 3:</b> Students will develop an understanding of the diversity of human culture and the unique nature of places [PLACES].</p> <p><b>3a:</b> Students will understand the processes which result in distinctive cultures, economic activity, and settlement form in particular locations across the world.</p> <p><b>Standard 4:</b> Students will develop an understanding of the character and use of regions and the connections between and among them [REGIONS].</p> <p><b>4.a:</b> Students will apply knowledge of the types of regions and methods of drawing boundaries to interpret the Earth's changing complexity</p>		<p><b><u>Learning Targets:</u></b> Students will determine the relationship between humans and the physical environment.</p> <p>Students will identify the processes that impact the relationship between two countries.</p>	
<p><b>Unit Four: Europe</b> <b>Timeline: 4-5 classes</b></p>			
<p><b>Standard 1</b> – Students will develop a personal geographic framework, or “mental map,” and understand the uses of maps and other geographics [MAPS] <b>1a:</b> Students will identify geographic patterns which emerge when collected data is mapped, and analyze mapped patterns through the application of such common geographic principles as -- Hierarchy (patterns at a detailed scale may</p>	<p>Physical process shape Earth’s surface.</p> <p>Cultures are held together by shared beliefs and common practices and values.</p> <p>Economic systems shape relationships in society.</p>	<p><b><u>Essential Questions:</u></b> Which European landforms do you think were shaped by the last Ice Age?  What factors influence Europe’s climate and vegetation?  How did the Industrial</p>	<p><b><u>Suggested Formative Assessments:</u></b> Visual Summary activities to help students synthesize major chapter themes. Critical thinking questions Document based questions Extension activities Geography online Participation in oral class discussions Case Study reviews</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>be related to patterns at a more general scale)  -- Accessibility (how easily one place can be reached from another)  -- Diffusion (how people or things move in certain directions at certain speeds)  -- Complimentarily (the mutual exchange of people or goods among places usually occurs over the shortest possible distances)</p> <p><b>1b:</b> Students will apply the analysis of mapped patterns to the solution of problems.</p> <p><b>Standard 2:</b> Students will develop a knowledge of the ways humans modify and respond to the natural environment [ENVIRONMENT].</p> <p><b>2 a:</b> Students will understand the Earth's physical environment as a set of interconnected systems (ecosystems) and the ways humans have perceived, reacted to, and changed environments at local to global scales</p> <p><b>Standard 3:</b> Students will develop an understanding of the diversity of human culture and the unique nature of places [PLACES].</p> <p><b>3a:</b> Students will understand the processes which result in distinctive cultures, economic activity, and settlement form in particular locations across the world.</p> <p><b>Standard 4:</b> Students will develop an understanding of the character and use of regions and the connections between and among them [REGIONS].</p>		<p>Revolution affect life in northern Europe?</p> <p>What factor united much of western Europe during the Middle Ages?</p> <p>What contributions from southern Europe formed the foundation for Western civilization?</p> <p>What major events in modern history have forced changes in the political and cultural makeup of eastern Europe?</p> <p>How are European countries developing distinct identities while also uniting for greater economic strength?</p> <p>How are economics and environmental issues in the region related?</p> <p><b><u>Learning Targets:</u></b>  Students will understand the importance of the values and beliefs of a particular society.</p> <p>Students will identify the impact of a countries economic system and its society.</p>	<p>Vocabulary Activities  <b><u>Suggested Summative Assessments</u></b>  Standardized test practice  Chapter assessment  Unit assessment  Primary Source research and presentation of findings  Content and presentation rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p><b>4.a:</b>Students will apply knowledge of the types of regions and methods of drawing boundaries to interpret the Earth's changing complexity</p>			
<p><b>Unit Five: Russia</b> <b>Timeline: 4-5 classes</b></p>			
<p><b>Standard 1</b> – Students will develop a personal geographic framework, or “mental map,” and understand the uses of maps and other geographics [MAPS]</p> <p><b>1a:</b> Students will identify geographic patterns which emerge when collected data is mapped, and analyze mapped patterns through the application of such common geographic principles as</p> <ul style="list-style-type: none"> <li>-- Hierarchy (patterns at a detailed scale may be related to patterns at a more general scale)</li> <li>-- Accessibility (how easily one place can be reached from another)</li> <li>-- Diffusion (how people or things move in certain directions at certain speeds)</li> <li>-- Complimentarily (the mutual exchange of people or goods among places usually occurs over the shortest possible distances)</li> </ul> <p><b>1b:</b> Students will apply the analysis of mapped patterns to the solution of problems.</p> <p><b>Standard 2:</b> Students will develop a knowledge of the ways humans modify and respond to the natural environment [ENVIRONMENT].</p> <p><b>2 a:</b> Students will understand the Earth's physical environment as a set of</p>	<p>Certain processes, patterns and functions help determine where people settle.</p> <p>The movement of people, goods, and ideas cause societies to change over time.</p> <p>Disputes over ideas, resources, values, and politics can lead to change.</p>	<p><b><u>Essential Questions:</u></b></p> <p>How might the physical environment of Russia influence human populations?</p> <p>How might Russia’s climate and vegetation be affected by the physical environment?</p> <p>How might Russia’s diverse population have influenced its cultural geography?</p> <p>How have Russia’s history and government been shaped by its many ethnic groups?</p> <p>How has Russia’s transition to a market economy affected its relationship with other countries?</p> <p>How might human actions that have modified Russia’s environment affect its growth?</p> <p><b><u>Learning Targets:</u></b></p> <p>Students will analyze how the movement of people and goods cause change within a society.</p>	<p><b><u>Suggested Formative Assessments:</u></b></p> <p>Visual Summary activities to help students synthesize major chapter themes.</p> <p>Critical thinking questions</p> <p>Document based questions</p> <p>Extension activities</p> <p>Geography online</p> <p>Participation in oral class discussions</p> <p>Case Study reviews</p> <p>Vocabulary Activities</p> <p><b><u>Suggested Summative Assessments</u></b></p> <p>Standardized test practice</p> <p>Chapter assessment</p> <p>Unit assessment</p> <p>Primary Source research and presentation of findings</p> <p>Content and presentation rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>interconnected systems (ecosystems) and the ways humans have perceived, reacted to, and changed environments at local to global scales</p> <p><b>Standard 3:</b> Students will develop an understanding of the diversity of human culture and the unique nature of places [PLACES].</p> <p><b>3a:</b> Students will understand the processes which result in distinctive cultures, economic activity, and settlement form in particular locations across the world.</p> <p><b>Standard 4:</b> Students will develop an understanding of the character and use of regions and the connections between and among them [REGIONS].</p> <p><b>4.a:</b> Students will apply knowledge of the types of regions and methods of drawing boundaries to interpret the Earth's changing complexity</p>		<p>Students will identify the causes of disputes within a society.</p>	
<p><b>Unit Six: North Africa, Southwest Asia and Central America</b> <b>Timeline: 6-7 classes</b></p>			
<p><b>Standard 1</b> – Students will develop a personal geographic framework, or “mental map,” and understand the uses of maps and other geographics [MAPS]</p> <p><b>1a:</b> Students will identify geographic patterns which emerge when collected data is mapped, and analyze mapped patterns through the application of such common geographic principles as</p> <ul style="list-style-type: none"> <li>-- Hierarchy (patterns at a detailed scale may be related to patterns at a more general scale)</li> <li>-- Accessibility (how easily one place can be</li> </ul>	<p>Places reflect the relationship between humans and the physical environment.</p> <p>Geography is used to interpret the past, understand the present, and plan for the future.</p> <p>Countries are affected by their relationships with each other.</p>	<p><b>Essential Questions:</b></p> <p>How has water played a role in defining the region of North Africa, Southwest Asia, and Central Asia?</p> <p>How does the climate of North Africa, Southwest Asia, and Central Asia affect natural vegetation and human activity?</p> <p>How have the Sahara and access to water affected the people of North Africa?</p>	<p><b>Suggested Formative Assessments:</b></p> <p>Visual Summary activities to help students synthesize major chapter themes.</p> <p>Critical thinking questions</p> <p>Document based questions</p> <p>Extension activities</p> <p>Geography online</p> <p>Participation in oral class discussions</p> <p>Case Study reviews</p> <p>Vocabulary Activities</p> <p><b>Suggested Summative Assessments</b></p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>reached from another)  -- Diffusion (how people or things move in certain directions at certain speeds)  -- Complimentarily (the mutual exchange of people or goods among places usually occurs over the shortest possible distances)</p> <p><b>1b:</b> Students will apply the analysis of mapped patterns to the solution of problems.</p> <p><b>Standard 2:</b> Students will develop a knowledge of the ways humans modify and respond to the natural environment [ENVIRONMENT].</p> <p><b>2 a:</b> Students will understand the Earth's physical environment as a set of interconnected systems (ecosystems) and the ways humans have perceived, reacted to, and changed environments at local to global scales</p> <p><b>Standard 3:</b> Students will develop an understanding of the diversity of human culture and the unique nature of places [PLACES].</p> <p><b>3a:</b> Students will understand the processes which result in distinctive cultures, economic activity, and settlement form in particular locations across the world.</p> <p><b>Standard 4:</b> Students will develop an understanding of the character and use of regions and the connections between and among them [REGIONS].</p> <p><b>4.a:</b> Students will apply knowledge of the types</p>		<p>How do ancient civilizations and cultures continue to influence the eastern Mediterranean today?</p> <p>What religious traditions have shaped the history of the Northeast?</p> <p>What has affected the modern development of the Arabian Peninsula?</p> <p>How have geography and climate created challenges for Central Asia?</p> <p>How has the presence of oil affected the economies of the countries in North Africa, Southwest Asia, and Central Asia?</p> <p>How have technology and war impacted the environment in North Africa, Southwest Asia, and Central Asia?</p> <p><b><u>Learning Targets:</u></b>  Students will understand the purpose of geography.</p> <p>Students will describe the relationship between several countries and how the relationship impacts their societies.</p>	<p>Standardized test practice  Chapter assessment  Unit assessment  Primary Source research and presentation of findings  Content and presentation rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
of regions and methods of drawing boundaries to interpret the Earth's changing complexity			
<b>Unit Seven: Africa South of the Sahara</b> <b>Timeline: 6-7 classes</b>			
<p><b>Standard 1</b> – Students will develop a personal geographic framework, or “mental map,” and understand the uses of maps and other geographics [MAPS]</p> <p><b>1a:</b> Students will identify geographic patterns which emerge when collected data is mapped, and analyze mapped patterns through the application of such common geographic principles as</p> <ul style="list-style-type: none"> <li>-- Hierarchy (patterns at a detailed scale may be related to patterns at a more general scale)</li> <li>-- Accessibility (how easily one place can be reached from another)</li> <li>-- Diffusion (how people or things move in certain directions at certain speeds)</li> <li>-- Complimentarily (the mutual exchange of people or goods among places usually occurs over the shortest possible distances)</li> </ul> <p><b>1b:</b> Students will apply the analysis of mapped patterns to the solution of problems.</p> <p><b>Standard 2:</b> Students will develop a knowledge of the ways humans modify and respond to the natural environment [ENVIRONMENT].</p> <p><b>2 a:</b> Students will understand the Earth's physical environment as a set of interconnected systems (ecosystems) and the ways humans have perceived, reacted to, and changed environments at local to global scales</p>	<p>Physical processes shape Earth’s surface.</p> <p>Places reflect the relationship between humans and the physical environment. The characteristics and distribution of human populations affect human and physical systems.</p>	<p><b>Essential Questions:</b></p> <p>What kinds of physical processes have shaped the African landscape?</p> <p>What factors influence climate in Africa south of the Sahara?</p> <p>How has the physical environment of the Sahel influenced ways of life in this subregion?</p> <p>How has East Africa’s location along the Red Sea and the Indian Ocean influenced its culture?</p> <p>How has the history of West Africa been affected by its physical location and influence by outside peoples?</p> <p>How have different peoples responded to the physical environment of Central Africa?</p> <p>How has colonial rule affected the peoples of Southern Africa?</p> <p>How might economic activities in Africa south of the Sahel be affected by the environment?</p>	<p><b>Suggested Formative Assessments:</b></p> <p>Visual Summary activities to help students synthesize major chapter themes.</p> <p>Critical thinking questions</p> <p>Document based questions</p> <p>Extension activities</p> <p>Geography online</p> <p>Participation in oral class discussions</p> <p>Case Study reviews</p> <p>Vocabulary Activities</p> <p><b>Suggested Summative Assessments</b></p> <p>Standardized test practice</p> <p>Chapter assessment</p> <p>Unit assessment</p> <p>Primary Source research and presentation of findings</p> <p>Content and presentation rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p><b>Standard 3:</b> Students will develop an understanding of the diversity of human culture and the unique nature of places [PLACES].</p> <p><b>3a:</b> Students will understand the processes which result in distinctive cultures, economic activity, and settlement form in particular locations across the world.</p> <p><b>Standard 4:</b> Students will develop an understanding of the character and use of regions and the connections between and among them [REGIONS].</p> <p><b>4.a:</b> Students will apply knowledge of the types of regions and methods of drawing boundaries to interpret the Earth's changing complexity</p>		<p>How do human actions contribute to environmental problems like desertification and deforestation?</p> <p><b>Learning Targets:</b> Students will identify the processes that shape Earth's surface.</p> <p>Students will be able to understand how a countries population affects the environment.</p>	
<p><b>Unit Eight: South Asia</b> <b>Timeline: 5-6 classes</b></p>			
<p><b>Standard 1</b> – Students will develop a personal geographic framework, or “mental map,” and understand the uses of maps and other geographics [MAPS]</p> <p><b>1a:</b> Students will identify geographic patterns which emerge when collected data is mapped, and analyze mapped patterns through the application of such common geographic principles as</p> <ul style="list-style-type: none"> <li>-- Hierarchy (patterns at a detailed scale may be related to patterns at a more general scale)</li> <li>-- Accessibility (how easily one place can be reached from another)</li> <li>-- Diffusion (how people or things move in certain directions at certain speeds)</li> <li>-- Complimentarily (the mutual exchange of</li> </ul>	<p>Places reflect the relationship between humans and the physical environment.</p> <p>Cultures are held together by shared beliefs and common practices and values.</p> <p>Economic systems shape relationships in society.</p>	<p><b>Essential Questions:</b></p> <p>How might the landscape influence how and where people choose to live in South Asia?</p> <p>In what significant way does climate affect the environment in South Asia?</p> <p>What things can one learn about a country by studying its people?</p> <p>In what ways can conflict shape a country?</p>	<p><b>Suggested Formative Assessments:</b></p> <p>Visual Summary activities to help students synthesize major chapter themes.</p> <p>Critical thinking questions</p> <p>Document based questions</p> <p>Extension activities</p> <p>Geography online</p> <p>Participation in oral class discussions</p> <p>Case Study reviews</p> <p>Vocabulary Activities</p> <p><b>Suggested Summative Assessments</b></p> <p>Standardized test practice</p> <p>Chapter assessment</p> <p>Unit assessment</p> <p>Primary Source research and presentation</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>people or goods among places usually occurs over the shortest possible distances)</p> <p><b>1b:</b> Students will apply the analysis of mapped patterns to the solution of problems.</p> <p><b>Standard 2:</b> Students will develop a knowledge of the ways humans modify and respond to the natural environment [ENVIRONMENT].</p> <p><b>2 a:</b> Students will understand the Earth's physical environment as a set of interconnected systems (ecosystems) and the ways humans have perceived, reacted to, and changed environments at local to global scales</p> <p><b>Standard 3:</b> Students will develop an understanding of the diversity of human culture and the unique nature of places [PLACES].</p> <p><b>3a:</b> Students will understand the processes which result in distinctive cultures, economic activity, and settlement form in particular locations across the world.</p> <p><b>Standard 4:</b> Students will develop an understanding of the character and use of regions and the connections between and among them [REGIONS].</p> <p><b>4.a:</b> Students will apply knowledge of the types of regions and methods of drawing boundaries to interpret the Earth's changing complexity</p>		<p>How might the location of a country influence its culture?</p> <p>What does it mean for countries to be economically independent?</p> <p>What environmental challenges might countries with large populations face?</p> <p><b><u>Learning Targets:</u></b> Student will analyze how the economic system affects the relationship the country has with others.</p> <p>Students will describe what factors are important within a culture in order for it to survive.</p>	<p>of findings Content and presentation rubrics</p>
<b>Unit Nine: East Asia</b>			

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Timeline: 5-6 classes</b>			
<p><b>Standard 1</b> – Students will develop a personal geographic framework, or “mental map,” and understand the uses of maps and other geo-graphics [MAPS]</p> <p><b>1a:</b> Students will identify geographic patterns which emerge when collected data is mapped, and analyze mapped patterns through the application of such common geographic principles as</p> <ul style="list-style-type: none"> <li>-- Hierarchy (patterns at a detailed scale may be related to patterns at a more general scale)</li> <li>-- Accessibility (how easily one place can be reached from another)</li> <li>-- Diffusion (how people or things move in certain directions at certain speeds)</li> <li>-- Complimentarily (the mutual exchange of people or goods among places usually occurs over the shortest possible distances)</li> </ul> <p><b>1b:</b> Students will apply the analysis of mapped patterns to the solution of problems.</p> <p><b>Standard 2:</b> Students will develop a knowledge of the ways humans modify and respond to the natural environment [ENVIRONMENT].</p> <p><b>2 a:</b> Students will understand the Earth's physical environment as a set of interconnected systems (ecosystems) and the ways humans have perceived, reacted to, and changed environments at local to global scales</p> <p><b>Standard 3:</b> Students will develop an understanding of the diversity of human</p>	<p>Certain processes, patterns, and functions help determine where people settle.</p> <p>Geography is used to interpret the past, understand the present, and plan for the future.</p> <p>Economic systems shape relationships in society.</p>	<p><b>Essential Questions:</b></p> <p>How has East Asia’s location on the Ring of Fire affected the region’s physical and human systems?</p> <p>What factors influence climate in East Asia?</p> <p>How might rural-to-urban migration affect the physical landscape in China?</p> <p>How might culture influence people’s perceptions in Japan?</p> <p>How can two countries with similar histories move in very different directions today?</p> <p>How might the move toward global economy impact countries in East Asia?</p> <p>How has rapid industrialization affected the environment in East Asia?</p> <p><b>Learning Targets:</b></p> <p>Students will identify the processes that shape Earth’s surface.</p> <p>Students will understand the importance of a countries economic system.</p>	<p><b>Suggested Formative Assessments:</b></p> <p>Visual Summary activities to help students synthesize major chapter themes.</p> <p>Critical thinking questions</p> <p>Document based questions</p> <p>Extension activities</p> <p>Geography online</p> <p>Participation in oral class discussions</p> <p>Case Study reviews</p> <p>Vocabulary Activities</p> <p><b>Suggested Summative Assessments</b></p> <p>Standardized test practice</p> <p>Chapter assessment</p> <p>Unit assessment</p> <p>Primary Source research and presentation of findings</p> <p>Content and presentation rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>culture and the unique nature of places [PLACES].</p> <p><b>3a:</b> Students will understand the processes which result in distinctive cultures, economic activity, and settlement form in particular locations across the world.</p> <p><b>Standard 4:</b> Students will develop an understanding of the character and use of regions and the connections between and among them [REGIONS].</p> <p><b>4.a:</b> Students will apply knowledge of the types of regions and methods of drawing boundaries to interpret the Earth's changing complexity</p>			
<p><b>Unit Ten: Southeast Asia</b> <b>Timeline: 5-6 classes</b></p>			
<p><b>Standard 1</b> – Students will develop a personal geographic framework, or “mental map,” and understand the uses of maps and other geo-graphics [MAPS]</p> <p><b>1a:</b> Students will identify geographic patterns which emerge when collected data is mapped, and analyze mapped patterns through the application of such common geographic principles as</p> <ul style="list-style-type: none"> <li>-- Hierarchy (patterns at a detailed scale may be related to patterns at a more general scale)</li> <li>-- Accessibility (how easily one place can be reached from another)</li> <li>-- Diffusion (how people or things move in certain directions at certain speeds)</li> <li>-- Complimentarily (the mutual exchange of people or goods among places usually occurs</li> </ul>	<p>The characteristics and distribution of ecosystems help people understand environmental issues.</p> <p>The movement of people, goods, and ideas cause societies to change over time.</p> <p>Geography and the environment play an important role in how a society is shaped over time.</p>	<p><b>Essential Questions:</b></p> <p>How has Southeast Asia’s location affected the region’s physical features?</p> <p>How do you think climate and influences ecosystems in Southeast Asia?</p> <p>What leads people to divide areas of land to create new countries?</p> <p>How might outside cultures influence the indigenous culture of a region or country?</p> <p>How do Southeast Asia’s</p>	<p><b>Suggested Formative Assessments:</b></p> <p>Visual Summary activities to help students synthesize major chapter themes.</p> <p>Critical thinking questions</p> <p>Document based questions</p> <p>Extension activities</p> <p>Geography online</p> <p>Participation in oral class discussions</p> <p>Case Study reviews</p> <p>Vocabulary Activities</p> <p><b>Suggested Summative Assessments</b></p> <p>Standardized test practice</p> <p>Chapter assessment</p> <p>Unit assessment</p> <p>Primary Source research and presentation of findings</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>over the shortest possible distances)</p> <p><b>1b:</b> Students will apply the analysis of mapped patterns to the solution of problems.</p> <p><b>Standard 2:</b> Students will develop a knowledge of the ways humans modify and respond to the natural environment [ENVIRONMENT]. <b>2 a:</b> Students will understand the Earth's physical environment as a set of interconnected systems (ecosystems) and the ways humans have perceived, reacted to, and changed environments at local to global scales</p> <p><b>Standard 3:</b> Students will develop an understanding of the diversity of human culture and the unique nature of places [PLACES].</p> <p><b>3a:</b> Students will understand the processes which result in distinctive cultures, economic activity, and settlement form in particular locations across the world.</p> <p><b>Standard 4:</b> Students will develop an understanding of the character and use of regions and the connections between and among them [REGIONS].</p> <p><b>4.a:</b> Students will apply knowledge of the types of regions and methods of drawing boundaries to interpret the Earth's changing complexity</p>		<p>mountainous terrain, volcanic soil, and tropical climate influence activities in the region?</p> <p>How might humans affect their physical environment?</p> <p><b>Learning Targets:</b> Students will be able to describe the environments role in society.</p> <p>Students will be able to understand how the movement of people, goods and ideas affect society.</p>	<p>Content and presentation rubrics</p>
<p><b>Unit Eleven: Australia, Oceania, and Antarctica</b> <b>Timeline: 5-6 classes</b></p>			
<p><b>Standard 1</b> – Students will develop a personal geographic framework, or “mental map,” and</p>	<p>Geography and the environment pay an important role in how a</p>	<p><b>Essential Questions:</b> How might the physical</p>	<p><b>Suggested Formative Assessments:</b> Visual Summary activities to help</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>understand the uses of maps and other geographics [MAPS]</p> <p><b>1a:</b> Students will identify geographic patterns which emerge when collected data is mapped, and analyze mapped patterns through the application of such common geographic principles as</p> <ul style="list-style-type: none"> <li>-- Hierarchy (patterns at a detailed scale may be related to patterns at a more general scale)</li> <li>-- Accessibility (how easily one place can be reached from another)</li> <li>-- Diffusion (how people or things move in certain directions at certain speeds)</li> <li>-- Complimentarily (the mutual exchange of people or goods among places usually occurs over the shortest possible distances)</li> </ul> <p><b>1b:</b> Students will apply the analysis of mapped patterns to the solution of problems.</p> <p><b>Standard 2:</b> Students will develop a knowledge of the ways humans modify and respond to the natural environment [ENVIRONMENT].</p> <p><b>2 a:</b> Students will understand the Earth's physical environment as a set of interconnected systems (ecosystems) and the ways humans have perceived, reacted to, and changed environments at local to global scales</p> <p><b>Standard 3:</b> Students will develop an understanding of the diversity of human culture and the unique nature of places [PLACES].</p> <p><b>3a:</b> Students will understand the processes which result in distinctive cultures, economic</p>	<p>society is shaped over time.</p> <p>The movement of people, goods, and ideas causes societies to change over time.</p> <p>Places reflect the relationship between humans and the physical environment.</p>	<p>geography contribute to the unique character of the region of Australia, Oceania and Antarctica?</p> <p>How does the climate of the region affect the lives of people in Australia and Oceania?</p> <p>How did the migration and settlement of foreign cultures affect indigenous cultures in Australia and New Zealand?</p> <p>How did European colonization affect the island countries of Oceania?</p> <p>How might the landscape affect economic activities in Australia and Oceania?</p> <p>How can human activity have a negative impact on the environment?</p> <p><b><u>Learning Targets:</u></b> Students will understand the impact on humans and the environment.</p>	<p>students synthesize major chapter themes.</p> <p>Critical thinking questions</p> <p>Document based questions</p> <p>Extension activities</p> <p>Geography online</p> <p>Participation in oral class discussions</p> <p>Case Study reviews</p> <p>Vocabulary Activities</p> <p><b><u>Suggested Summative Assessments</u></b></p> <p>Standardized test practice</p> <p>Chapter assessment</p> <p>Unit assessment</p> <p>Primary Source research and presentation of findings</p> <p>Content and presentation rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>activity, and settlement form in particular locations across the world.</p> <p><b>Standard 4:</b> Students will develop an understanding of the character and use of regions and the connections between and among them [REGIONS].</p> <p><b>4.a:</b>Students will apply knowledge of the types of regions and methods of drawing boundaries to interpret the Earth's changing complexity</p>			

## Curriculum Framework for Civics, Citizenship and Economics

School: Newark Charter School

Curricular Tool: Civics in Practice - Holt McDougal

Grade: 10

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit One: A Tradition of Democracy</b> <b>Timeline : 18-20 classes</b>			
<p><b>Civics Standard 1:</b> Students will examine the structure and purposes of governments with specific emphasis on constitutional democracy [Government].</p>	<p>As a U.S. Citizen, it is your duty to help preserve freedom and to ensure justice and equality for yourself and all American.</p> <p>Throughout history, immigrants have brought their languages, ideas, beliefs, hopes and customs to the United States. Their ways of life are constantly mixing with and influencing the culture of Americans who came before.</p> <p>Government plays an essential role in every country. A country's government affects the lives of the people. Often it affects people around the world.</p> <p>The American ideals that people should rule themselves and that government should protect human rights are clearly set forth in the Declaration of Independence.</p> <p>The Constitution is an enduring document that has met the needs of a changing country for more than 200 years. Other amendments to the Constitution expanded the civil rights of Americans.</p>	<p><b><u>Essential Questions:</u></b> Why do we study civics?</p> <p>What are the roles and qualities of good citizens?</p> <p>How does a person become a U.S. citizen?</p> <p>What are the main types of government?</p> <p>How does the U.S. government guarantee freedom to its citizens?</p> <p>What was the effect of a weak national government on the United States?</p> <p>What are two ways in which the constitution can be changed?</p> <p><b><u>Learning Targets:</u></b> Students will the importance of freedom to all Americans.</p> <p>Students will demonstrate knowledge of how governments affect the lives of their citizens.</p>	<p><b><u>Suggested Formative Assessments:</u></b> Main idea activities Vocabulary activities Quiz game Alternative assessment handbook Test practice handbook Critical thinking and extension activities Participation in oral class discussions Students Take Action Activities</p> <p><b><u>Suggested Summative Assessment:</u></b> Daily quizzes Chapter assessment Unit assessment</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit Two: The Federal Government</b> <b>Timeline: 15-16 classes</b>			
<p><b>Civics Standard 1:</b> Students will examine the structure and purposes of governments with specific emphasis on constitutional democracy [Government].</p> <p><b>Civics Standard 2:</b> Students will understand the principles and ideals underlying the American political system [Politics].</p>	<p>Congress is organized and led in a way that fosters democracy.</p> <p>Congress has many powers, but there are limits those powers.</p> <p>The branches of government are divided into specific departments.</p> <p>The independent agencies and regulatory commissions of the U.S. government perform specialized duties.</p> <p>The rights of all U.S. citizens are protected by laws and courts.</p>	<p><b><u>Essential Questions:</u></b></p> <p>What are the roles or the various branches of government?</p> <p>What powers does the office of president have?</p> <p>In what ways is the United States a nation of laws?</p> <p>What is the role of the Supreme Court?</p> <p>How has the Supreme Court strengthened constitutional rights?</p> <p><b><u>Learning Targets:</u></b></p> <p>Students will evaluate, take and defend positions on the contemporary role of organized groups in American social and political world.</p> <p>Students will be able to describe the purpose, organization, and functions of the three branches of national government.</p> <p>Students will be able to explain how the overall design and specific features of the Constitution are intended to balance and check powers in order to prevent abuse.</p>	<p><b><u>Suggested Formative Assessments:</u></b></p> <p>Main idea activities  Vocabulary activities  Quiz game  Alternative assessment handbook  Test practice handbook  Critical thinking and extension activities  Participation in oral class discussions  Students Take Action Activities</p> <p><b><u>Suggested Summative Assessment:</u></b></p> <p>Daily quizzes  Chapter assessment  Unit assessment  Debate on the role of organized political and social groups in America  Rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit Three: State and Local Government</b> <b>Timeline: 11-12 classes</b>			
<p><b>Civics Standard 1:</b> Students will examine the structure and purposes of governments with specific emphasis on constitutional democracy [Government].</p> <p><b>Civics Standard 2:</b> Students will understand the principles and ideals underlying the American political system [Politics].</p>	<p>The federal system of the United States allows state governments to serve the needs of their citizens while cooperating as a united country.</p> <p>A state’s executive branch, led by the governor, carries out laws made by the state’s legislative branch.</p> <p>State court systems include lower courts, general trial courts, appeals courts and state supreme courts.</p> <p>As Americans settled in rural communities, towns and cities and suburbs, they set up local governments.</p> <p>The large population of cities creates many challenges for city government.</p> <p>You live under three levels of government- local, states, and federal- that all cooperate with each other.</p>	<p><b><u>Essential Questions:</u></b></p> <p>What powers do states have?</p> <p>How do states work together with other states and the national government?</p> <p>How are local governments established?</p> <p>How is the county government organized?</p> <p>What are the different forms of city government?</p> <p><b><u>Learning Targets:</u></b></p> <p>Students will identify powers most commonly associated with state governments.</p> <p>Students will be able to explain how individuals can help shape the public agenda.</p> <p>Students will be able to describe how government is a formal institution with the authority to make and implement binding decisions.</p> <p>Students will be able to identify the major responsibilities of state and local government.</p>	<p><b><u>Suggested Formative Assessments:</u></b></p> <p>Main idea activities</p> <p>Vocabulary activities</p> <p>Quiz game</p> <p>Alternative assessment handbook</p> <p>Test practice handbook</p> <p>Critical thinking and extension activities</p> <p>Participation in oral class discussions</p> <p>Students Take Action Activities</p> <p><b><u>Suggested Summative Assessment:</u></b></p> <p>Daily quizzes</p> <p>Chapter assessment</p> <p>Unit assessment</p> <p>Visual representation and presentation of the intertwining of local, state and federal governments.</p> <p>Content and Presentation rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit Four: The Citizen in Government</b> <b>Timeline: 14-15 classes</b>			
<p><b>Civics Standard 1:</b> Students will examine the structure and purposes of governments with specific emphasis on constitutional democracy [Government].</p> <p><b>Civics Standard 2:</b> Students will understand the principles and ideals underlying the American political system [Politics].</p>	<p>Political parties are made up of people with similar political ideas who put these ideas into action at all levels of government.</p> <p>The right to vote is one of the most important rights held by U.S. citizens.</p> <p>Political leaders and interest groups find many ways to influence the beliefs of American citizens.</p> <p>Americans can participate in government by voting and speaking out on the issues that matter to them.</p> <p>Each year the local, state, and federal governments provide many services and pay for them with taxes collected from citizens.</p> <p>Federal, state and local governments all have mechanisms to manage the many billions of dollars they collect and spend each year.</p>	<p><b><u>Essential Questions:</u></b></p> <p>What is the role of the political parties in the United States?</p> <p>What impact have third-parties had on the United States?</p> <p>How are political parties organized?</p> <p>What are the two main sources of money for financing political parties?</p> <p>How has the voting process changed over the years?</p> <p>What is the purpose of the electoral college?</p> <p>Do interest groups have too much power?</p> <p>What guidelines do governments use when taxing citizens?</p> <p><b><u>Learning Targets:</u></b></p> <p>Students will be able to describe the origin and development of the two-party system in the United States.</p> <p>Students will be able to explain the relationship of individual participation in the political process.</p> <p>Students will be able to describe politics as the process by which a group of people, whose opinions or</p>	<p><b><u>Suggested Formative Assessments:</u></b></p> <p>Main idea activities  Vocabulary activities  Quiz game  Alternative assessment handbook  Test practice handbook  Critical thinking and extension activities  Participation in oral class discussions  Students Take Action Activities</p> <p><b><u>Suggested Summative Assessment:</u></b></p> <p>Daily quizzes  Chapter assessment  Unit assessment</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
		<p>interests might be divergent, seek the power to influence decisions about how to manage their government.</p> <p>Students will be able to evaluate the importance for the individual and society of paying taxes.</p> <p>Students will be able to identify the major uses of tax revenues.</p>	
<p><b>Unit Five: The Citizen in Society</b> <b>Timeline: 17-18 classes</b></p>			
<p><b>Civics Standard 1:</b> Students will examine the structure and purposes of governments with specific emphasis on constitutional democracy [Government].</p> <p><b>Civics Standard 2:</b> Students will understand the principles and ideals underlying the American political system [Politics].</p> <p><b>Civics Standard 3:</b> Students will understand the responsibilities, rights, and privileges of United States citizens [Citizenship].</p>	<p>From colonial times to today, the American family has changed in many ways, but it still plays an important economic and social role in the United States.</p> <p>The family continues to be the most important group in society, and it performs many functions for its members and for the country.</p> <p>Education is vital to our society and our democracy, and it can help you prepare to be a good citizen.</p> <p>There are many different kinds of communities, but all communities take advantage of their surroundings. Communities provide many benefits and services to their residents and depend on cooperation among people.</p> <p>The three-part criminal system consists of police, courts, and corrections, and is used to keep the</p>	<p><b><u>Essential Questions:</u></b></p> <p>How has the American family changed since colonial times?</p> <p>What are five ways the family serves the country?</p> <p>Why is education important?</p> <p>How are learning and experience related?</p> <p>What factors affect the location of communities?</p> <p>What types of services do communities provide?</p> <p>What is the role and function of our justice system?</p> <p><b><u>Learning Targets:</u></b></p> <p>Students will be able to explain the meaning and importance of respect for the rights and choices of</p>	<p><b><u>Suggested Formative Assessments:</u></b></p> <p>Main idea activities Vocabulary activities Quiz game Alternative assessment handbook Test practice handbook Critical thinking and extension activities Participation in oral class discussions Students Take Action Activities</p> <p><b><u>Suggested Summative Assessment:</u></b></p> <p>Daily quizzes Chapter assessment Unit assessment</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
	peace and bring criminals to justice.	<p>individuals.</p> <p>Students will be able to explain the important factors that have helped shaped American society, such as universal public education.</p> <p>Students will be able to explain the meaning and importance of self-discipline and self-governance.</p> <p>Students will be able to explain the idea that citizenship confers certain rights and privileges.</p> <p>Students will be able to explain how the individual’s rights to life, liberty, and property are protected.</p>	
<p><b>Unit Six: The American Economy</b> <b>Timeline: 28-29 classes</b></p>			
<p><b>Economics Standard 1:</b> Students will analyze the potential costs and benefits of personal economic choices in a market economy [Microeconomics].</p> <p><b>1a.</b> Students will demonstrate how individual economic choices are made within the context of a market economy in which markets influence the production and distribution of goods and services.</p> <p><b>Economics Standard 2:</b> Students will examine the interaction of individuals, families, communities, businesses, and governments in a</p>	<p>Countries form many types of economic systems, such as the U.S. market economy, to meet their citizens’ needs and wants.</p> <p>Business owners make decisions about their use of natural resources, capital, labor, and entrepreneurship with little government interference.</p> <p>Mass production of goods in the United States and an extensive service sector have made the economy one of the most successful in the world.</p> <p>Private and government insurance help protect people from risk and</p>	<p><b>Essential Questions:</b></p> <p>What is the U.S. economic system like?</p> <p>How do corporations function in the United States?</p> <p>What is the government’s role in the economy?</p> <p>How are profit, risk and innovation related?</p> <p>How are goods and services marketed to consumers?</p> <p>What do independent organizations</p>	<p><b>Suggested Formative Assessments:</b></p> <p>Main idea activities Vocabulary activities Quiz game Alternative assessment handbook Test practice handbook Critical thinking and extension activities Participation in oral class discussions Students Take Action Activities</p> <p><b>Suggested Summative Assessment:</b></p> <p>Daily quizzes Chapter assessment Unit assessment</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>market economy [Macroeconomics].</p> <p><b>2a.</b> Students will develop an understanding of how economies function as a whole, including the causes and effects of inflation, unemployment, business cycles, and monetary and fiscal policies.</p> <p><b>Economics Standard 3:</b> Students will understand different types of economic systems and how they change [Economic systems].</p> <p><b>3a.</b> Students will analyze the wide range of opportunities and consequences resulting from the current transitions from command to market economies in many countries.</p> <p><b>Economics Standard 4:</b> Students will examine the patterns and results of international trade [International trade].</p> <p><b>4a.</b> Students will analyze and interpret the influence of the distribution of the world's resources, political stability, national efforts to encourage or discourage trade, and the flow of investment on patterns of international trade.</p>	<p>uncertainty.</p> <p>In the course of the business cycle, the U.S. economy goes through periods of growth and decline, with the worst decline occurring during the 1930's Great Depression.</p> <p>Workers formed labor unions, which today are regulated by government, to force employers to improve working conditions and wages.</p> <p>The government helps the economy by using regulation, fiscal policy, and monetary policy.</p> <p>By law, employers cannot discriminate against job applicants because of their sex, age, religion, or ethnic background.</p>	<p>and the government do to protect the consumer?</p> <p>How is business credit useful to the economy as a whole?</p> <p>How and why does the U.S. Federal Reserve System regulate the amount of money in circulation?</p> <p>What are some forms of insurance provided by the government?</p> <p>What was the government's response to the Great Depression?</p> <p>How can citizens help improve the economy?</p> <p><b>Learning Targets:</b> Students will be able to explain the important factors that have helped shaped American society, such as market economy; compare the distinctive characteristics of American society with those of other countries.</p> <p>Students will be able to describe the principal economic, technological, and cultural effects the United States has had on the world.</p> <p>Students will be able to explain the meaning and importance if individual responsibility-fulfilling the moral and legal obligations of membership in society.</p>	

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
		Students will be able to explain how political and economic freedoms serve to limit government power.	
<b>Unit Seven: The United States and the World</b> <b>Timeline: 8-9 classes</b>			
<p><b>Civics Standard 4:</b> Students will develop and employ the civic skills necessary for effective, participatory citizenship [Participation].</p> <p><b>Economics Standard 3:</b> Students will understand different types of economic systems and how they change [Economic systems].</p> <p><b>3a.</b> Students will analyze the wide range of opportunities and consequences resulting from the current transitions from command to market economies in many countries.</p> <p><b>Economics Standard 4:</b> Students will examine the patterns and results of international trade [International trade].</p> <p><b>4a.</b> Students will analyze and interpret the influence of the distribution of the world's resources, political stability, national efforts to encourage or discourage trade, and the flow of investment on patterns of</p>	<p>Both the president and Congress play roles in conducting foreign policy and building U.S. relationships with many foreign countries.</p> <p>The United Nations provides a forum in which countries may discuss serious problems and work towards solutions.</p> <p>To promote peace and stability, the United States engages in diplomatic alliances with other countries to serve mutual defense, economic, and other needs.</p> <p>For many years, U.S. leaders shaped foreign policy to avoid involvement in the affairs of other countries, but as times changed, the country was forced to become more involved in world affairs.</p> <p>The relationship between the United States and the Soviet Union deteriorated after World War II, and the countries entered into a competition for global power known as the Cold War.</p> <p>Emerging global conflicts and trends have led the United States and other governments to rethink some foreign</p>	<p><b>Essential Questions:</b></p> <p>What are the goals of U.S. foreign policy?</p> <p>What other governmental agencies help the president and Congress conduct foreign policy?</p> <p>What are the goals of United States foreign policy?</p> <p>Why is diplomacy important?</p> <p>What forms can U.S. foreign aid take?</p> <p>What is the role of the United Nations in the modern role?</p> <p>Why did the United States find it difficult to maintain a policy of isolationism in its early years?</p> <p>How did the United States use its containment policy to respond to the Berlin blockade, the Cuban missile crisis, the Korean War, and the Vietnam War?</p> <p><b>Learning Targets:</b></p> <p>Students will be able to describe the</p>	<p><b>Suggested Formative Assessments:</b></p> <p>Main idea activities  Vocabulary activities  Quiz game  Alternative assessment handbook  Test practice handbook  Critical thinking and extension activities  Participation in oral class discussions  Students Take Action Activities</p> <p><b>Suggested Summative Assessment:</b></p> <p>Daily quizzes  Chapter assessment  Unit assessment  Research on past and present foreign aid campaigns. Present findings in an editorial.  Rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
international trade.	policies, but the primary goals of U.S. foreign policy remain the same.	<p>various means used to attain the ends of United States foreign policy, such as diplomacy; economic, military and humanitarian aid; treaties; sanctions; military interventions; covert actions.</p> <p>Students will be able to explain the significance of principal policies and events in the United States' relations with the world.</p> <p>Students will be able to describe the role of the United States in establishing and maintaining international organizations.</p>	

# Curriculum Framework for U.S. History

School: Newark Charter School

Curricular Tool: The Americans – Holt McDougal

Grade: 11

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit One: American Beginnings to 1783</b> <b>Timeline : 23- 24 classes</b>			
<p><b>Standard 1-</b> Students will employ chronological concepts in analyzing historical phenomena [Chronology]</p> <p><b>1a-</b>Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.</p> <p><b>Standard 2 -</b> Students will gather, examine, and analyze historical data.</p> <p><b>2a-</b> Students will develop and implement effective research strategies for investigating a given historical topic.</p> <p><b>2b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.</p> <p><b>Standard 3 -</b> Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p>	<p>In ancient times, migrating peoples settled the America’s, where their descendant developed complex societies.</p> <p>The varied landscapes of North America encouraged the diversity of Native American culture.</p> <p>Columbus’ voyages set off a chain of events that brought together the peoples of Europe, Africa, and the Americas.</p> <p>Throughout the 1500s and 1600s, the Spanish conquered Central and portions of North America.</p> <p>The first permanent English settlement in North America was founded at Jamestown, Virginia in 1607.</p> <p>The Dutch settled New Netherlands; English Quakers led by William Penn settled Pennsylvania.</p> <p>England and its largely self-</p>	<p><b>Essential Questions:</b></p> <p>How did the convergence of peoples from North America, Africa, and Europe affect the culture?</p> <p>What were the reasons for European colonization of the Americas and how did the original 13 English colonies take hold in what is now the United States?</p> <p>How did the colonies develop economically, socially, and politically?</p> <p>What were the causes and major events of the American revolution and who were the significant individuals involve in the conflict?</p> <p><b>Learning Targets:</b></p> <p>Students will be able to discuss the development and growth of early societies in the Americas.</p> <p>Students will be able to analyze the effects of European exploration on Europeans,</p>	<p><b>Suggested Summative Assessments:</b></p> <p>Online test preparation Self-assessment activities Vocabulary Critical thinking questions Guided reading workbook Skill builder activities Participation in oral class discussions Extended thinking activities Virtual Museum visit and map activities</p> <p><b>Suggested Formative Assessments:</b></p> <p>Lesson assessments Chapter assessments Formal unit assessments Rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p><b>Standard 4-</b> Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history.</p> <p><b>4b-</b> Students will develop an understanding of recent and modern world history and its connection to United States history, including:  --Intensified hemispheric interactions (1,000-1,500 AD)  --Explorations, contact, and interactions across the world (1450-1770)  --Revolutions, ideologies, and technological change (1750-1914)  --The 20th Century world (1900-present)</p>	<p>governing colonies prospered under a mutually beneficial trade relationship.  Conflict between Great Britain and the American colonies grew over issues of taxation, representation, and liberty.</p> <p>Strategic victories in the south and at Yorktown enabled the Americans to defeat the British.</p>	<p>Africans, and Native Americans.</p> <p>Students will be able to describe how the Spanish conquered Native American peoples.</p> <p>Students will be able to describe the Northern and Southern colonies and explain how they differed.</p> <p>Students will analyze how the French and Indian War affected the colonies.</p> <p>Students will be able to explain why the colonists fought for independence from Great Britain.</p>	
<p><b>Unit Two: A New Nation</b>  <b>Timeline: 15-16 classes</b></p>			
<p><b>Standard 1-</b> Students will employ chronological concepts in analyzing historical phenomena [Chronology]</p> <p><b>1a-</b>Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.</p> <p><b>Standard 2 -</b> Students will gather, examine, and analyze historical data.</p> <p><b>2a-</b> Students will develop and implement effective research strategies for investigating a given historical topic.</p>	<p>Americans adopted the Articles of Confederation but found the new government too weak to solve the nation’s problems.</p> <p>During the debate on the constitution, the Federalist promised to add a bill of rights in order to get the constitution ratified.</p> <p>President Washington transformed the ideas of the Constitution into a real government.</p>	<p><b>Essential Questions:</b></p> <p>What challenges did the new American republic face, and how did the U.S. Constitution reflect those challenges?</p> <p>What major domestic and foreign problems faced the leaders of the new Republic?</p> <p>How did regional differences contribute to the growing conflict over states’ rights versus federal power?</p> <p>What were the causes and effects</p>	<p><b>Suggested Summative Assessments:</b></p> <p>Online test preparation  Self-assessment activities  Vocabulary  Critical thinking questions  Guided reading workbook  Skillbuilder activities  Extended thinking activities</p> <p><b>Suggested Formative Assessments:</b></p> <p>Lesson assessments  Chapter assessments  Formal unit assessments  Primary source investigations  Presentation and writing rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p><b>2b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.</p> <p><b>Standard 3</b> - Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p> <p><b>Standard 4</b> - Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history.</p> <p><b>4b-</b> Students will develop an understanding of recent and modern world history and its connection to United States history, including:  --Intensified hemispheric interactions (1,000-1,500 AD)  --Explorations, contact, and interactions across the world (1450-1770)  --Revolutions, ideologies, and technological change (1750-1914)  --The 20th Century world (1900-present)</p>	<p>The United States expanded its borders during Thomas Jefferson’s administration.</p> <p>The North and South developed economic systems that led to political differences between the regions.</p> <p>Andrew Jackson’s policies spoke for the common people but violated Native American rights.</p> <p>Slavery became an explosive issue, as many Americans joined reformers working to put an end to it.</p> <p>Women reformers expanded their efforts from movements such as abolition and temperance to include women’s rights.</p>	<p>of the Second Great Awakening and the various reform movements that swept the nation in the first half of the 19<sup>th</sup> century?</p> <p><b><u>Learning Targets:</u></b>  Students will describe the problems faced by the Confederation.</p> <p>Students will be able to contrast the Federalist and Antifederalist arguments over the Constitution.</p> <p>Students will be able to explain why the United States needed to establish new government traditions.</p> <p>Students will be able to describe the challenges at home and abroad that led the United States to declare war on Great Britain.</p> <p>Students will be able to identify the economic differences among different regions of the United States.</p> <p>Students will be able to describe the conflict over states’ rights.</p> <p>Students will be able to identify how the campaigns for abolition and for equality for women were linked.</p>	

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit Three: An Era of Growth and Disunion</b> <b>Timeline: 15-16 classes</b>			
<p><b>Standard 1-</b> Students will employ chronological concepts in analyzing historical phenomena [Chronology]</p> <p><b>1a-</b> Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.</p> <p><b>Standard 2 -</b> Students will gather, examine, and analyze historical data.</p> <p><b>2a-</b> Students will develop and implement effective research strategies for investigating a given historical topic.</p> <p><b>2b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.</p> <p><b>Standard 3 -</b> Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p> <p><b>Standard 4-</b> Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content].</p>	<p>Technological changes created greater interaction and more economic diversity among the regions of the nation.</p> <p>Mexico offered land grants to American settlers, but conflict developed over religion and other cultural differences, and the issue of slavery.</p> <p>Tensions over the annexation of Texas led to war with Mexico, resulting in huge territorial gains for the United States.</p> <p>The issue of slavery dominated U.S. politics in the early 1850s.</p> <p>In the mid-1850s, the issue of slavery and other factors split political parties and led to the birth of new ones.</p> <p>By issuing the Emancipation Proclamation, President Lincoln made slavery the focus of the war.</p> <p>The Civil War brought about dramatic social and economic changes in American Society.</p> <p>Congress opposed Lincoln’s and Johnson’s plans for Reconstruction and instead</p>	<p><b>Essential Questions:</b></p> <p>What were the causes and consequences of westward expansion?</p> <p>How did conflict over slavery and other regional tensions lead to the Civil War?</p> <p>What were the strategies, outcomes, and legacies of the Civil War?</p> <p>What were the political struggles, accomplishments, and failures of Reconstruction in the years following the Civil War?</p> <p><b>Learning Targets:</b></p> <p>Students will be able to identify the effects of technological changes on the nation.</p> <p>Students will be able to explain the concept of manifest destiny and its effect on Native Americans.</p> <p>Students will be able to explain why people living in different regions of the country might have different attitudes and beliefs.</p> <p>Students will be able to describe how Abraham Lincoln came to power and explain why his election in 1860 led to the</p>	<p><b>Suggested Summative Assessments:</b></p> <p>Online test preparation Self-assessment activities Vocabulary Critical thinking questions Guided reading workbook Skillbuilder activities</p> <p><b>Suggested Formative Assessments:</b></p> <p>Lesson assessments Chapter assessments Formal unit assessments Debate Rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p><b>4a-</b> Students will develop an understanding of modern United States history, its connections to both Delaware and world history, including:</p> <ul style="list-style-type: none"> <li>--Civil War and Reconstruction (1850-1877)</li> <li>--Development of an industrialized nation (1870-1900)</li> <li>--Emergence of modern America (1890-1930)</li> <li>--Great Depression and World War II (1929-1945)</li> <li>--Postwar United States (1945- early 1970s)</li> <li>--Contemporary United States (1968-present)</li> </ul> <p><b>4b-</b> Students will develop an understanding of recent and modern world history and its connection to United States history, including:</p> <ul style="list-style-type: none"> <li>--Intensified hemispheric interactions (1,000-1,500 AD)</li> <li>--Explorations, contact, and interactions across the world (1450-1770)</li> <li>--Revolutions, ideologies, and technological change (1750-1914)</li> <li>--The 20th Century world (1900-present)</li> </ul>	<p>implemented its own plan to rebuild the South.</p>	<p>secession of some southern states.</p> <p>Students will be able to explain how the Civil War ended.</p> <p>Students will be able to summarize the key effects of the Civil War on the society, economy, and politics of the United States.</p> <p>Students will be to identify the special challenges that a country might face after a civil war.</p> <p>Students will be able to explain why Reconstruction of the South collapsed.</p>	
<p><b>Unit Four: Changing Interpretations of Reconstruction-(Delaware Model Unit)</b> <b>Timeline: 5-7 classes</b></p>			
<p><b>Standard 3-</b> Students will interpret historical data [Interpretation].</p> <p><b>9-12a:</b> Students will compare competing historical narratives by contrasting different historians’ choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p>	<p>Historical interpretations of an event change over time</p>	<p><b>Essential Questions:</b> In what ways are historical interpretations influenced by the time in which they are written and by whom they are written?</p>	<p><b>Suggested Summative Assessments:</b> Textbook excerpts on Reconstruction from <i>History in the Making</i> Document Analysis Chart Transfer Task: Historical views of Columbus Reconstruction Anticipation Guide Summative Assessment Rubric Extension activities</p> <p><b>Suggested Formative Assessments:</b></p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
			Lesson assessment Chapter assessments Formal unit assessments Virtual Museum Field Trip with debate weighing in on the positive and negatives of white influence on the social, political, cultural and personal life of Native Americans. Presentation Rubric
<b>Unit Five: Migration and Industrialization</b> <b>Timeline: 18-19 classes</b>			
<p><b>Standard 1-</b> Students will employ chronological concepts in analyzing historical phenomena [Chronology]</p> <p><b>1a-</b> Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.</p> <p><b>Standard 2 -</b> Students will gather, examine, and analyze historical data.</p> <p><b>2a-</b> Students will develop and implement effective research strategies for investigating a given historical topic.</p> <p><b>2b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.</p> <p><b>Standard 3 -</b> Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing</p>	<p>The cattle industry boomed in the late 1800s, as the culture of the Plains Indians declined.</p> <p>Farmers united to address their economic problems, giving rise to the Populist movement.</p> <p>At the end of the 19<sup>th</sup> century, natural resources, creative ideas, and growing markets fueled an industrial boom.</p> <p>The expansion of industry resulted in the growth of big business and prompted laborers to form unions to better their lives.</p> <p>Immigration from Europe, Asia, the Caribbean, and Mexico reached a new high in the late 19<sup>th</sup> and early 20<sup>th</sup> century.</p> <p>The rapid growth of cities</p>	<p><b><u>Essential Questions:</u></b>            How did Westward migration after the Civil War affect the United States?</p> <p>What impact did scientific discoveries and manufacturing processes have on the nature of work, the American labor movement, and American businesses?</p> <p>What were the economic, social, and political effects of immigration?</p> <p>What were the significant trends in areas such as technology, education, race relations, and mass culture at the turn of the 20<sup>th</sup> century?</p> <p><b><u>Learning Targets:</u></b>            Students will be able to explain the effect of westward expansion on Native Americans.</p>	<p><b><u>Suggested Summative Assessments:</u></b>            Online test preparation            Self-assessment activities            Vocabulary            Critical thinking questions            Guided reading workbook            Skillbuilder activities            Extension activities</p> <p><b><u>Suggested Formative Assessments:</u></b>            Lesson assessments            Chapter assessments            Formal unit assessments            Research on key players of the Progressive Era            Rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p> <p><b>Standard 4-</b> Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content].</p> <p><b>4a-</b> Students will develop an understanding of modern United States history, its connections to both Delaware and world history, including:  --Civil War and Reconstruction (1850-1877)  --Development of an industrialized nation (1870-1900)  --Emergence of modern America (1890-1930)  --Great Depression and World War II (1929-1945)  --Postwar United States (1945- early 1970s)  --Contemporary United States (1968-present)</p> <p><b>4b-</b> Students will develop an understanding of recent and modern world history and its connection to United States history, including:  --Intensified hemispheric interactions (1,000-1,500 AD)  --Explorations, contact, and interactions across the world (1450-1770)  --Revolutions, ideologies, and technological change (1750-1914)  --The 20th Century world (1900-present)</p>	<p>forced people to contend with problems of housing, transportation, and sanitation.</p> <p>Reforms in public education led to a rise in national literacy and the promotion of public education.</p> <p>As Americans had more time for leisure activities, a modern mass culture emerged.</p>	<p>Students will be able to address the rise of the Populist Party.</p> <p>Students will be able to list the developments that helped industries to grow in the late 1880s.</p> <p>Students will be able to explain why workers organized unions and staged labor strikes.</p> <p>Students will be able to describe the challenges of urbanization.</p> <p>Students will be able to describe how scientific and technological developments affected life at the turn of the 20<sup>th</sup> century.</p> <p>Students will be able to discuss what life was like for African-Americans at the turn of the 20<sup>th</sup> century.</p>	
<p><b>Unit Six: Modern America Emerges</b>  <b>Timeline: 16-17 classes</b></p>			
<p><b>Standard 1-</b> Students will employ</p>	<p>Political, economic, and social</p>	<p><b>Essential Questions:</b></p>	<p><b>Suggested Summative Assessments:</b></p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>chronological concepts in analyzing historical phenomena [Chronology]</p> <p><b>1a-</b>Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.</p> <p><b>Standard 2 -</b> Students will gather, examine, and analyze historical data. <b>2a-</b> Students will develop and implement effective research strategies for investigating a given historical topic.</p> <p><b>2b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.</p> <p><b>Standard 3 -</b> Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p> <p><b>Standard 4-</b> Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content].</p> <p><b>4a-</b> Students will develop an understanding of modern United States history, its connections to both Delaware and world history,</p>	<p>change in the late 19<sup>th</sup> century America led to broad progressive reforms.</p> <p>As president, Theodore Roosevelt worked to give citizens a Square Deal through progressive reforms.</p> <p>Taft’s ambivalent approach to progressive reform led to a split in the Republican party and the loss of the presidency to the Democrats.</p> <p>Woodrow Wilson established a strong reform agenda as a progressive leader.</p> <p>Beginning in 1867 and continuing through the century, global competition caused the United States to expand.</p> <p>In 1898, the United States went to war to help Cuba win its independence from Spain.</p> <p>The Russo-Japanese War, the Panama Canal, and the Mexican Revolution added to America’s military and economic power. As World War I intensified, the United States was forced to abandon it neutrality.</p> <p>World War I spurred social,</p>	<p>How did the progressive movement try to bring about social change?</p> <p>Which individuals and events moved the United States into the role of a world power?</p> <p>How did World War I affect the United States and Europe?</p> <p><b>Learning Targets:</b> Students will be able to explain how the progressive movement increased the power of government to bring about reform.</p> <p>Students will be able to describe the efforts brought about to regulate business and protect individuals.</p> <p>Students will be able to explain the economic and cultural factors that fueled the growth of American Imperialism.</p> <p>Students will be able to describe how the United States acquired Alaska and the take-over of the Hawaiian Islands.</p> <p>Students will be able to analyze the social changes in the United States that were accelerated by the war.</p>	<p>Online test preparation Self-assessment activities Vocabulary Critical thinking questions Guided reading workbook Skillbuilder activities Extension Activities <b>Suggested Formative Assessments:</b> Lesson assessments Chapter assessments Formal unit assessments Comparison of post war issues and modern America Rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>including:  --Civil War and Reconstruction (1850-1877)  --Development of an industrialized nation (1870-1900)  --Emergence of modern America (1890-1930)  --Great Depression and World War II (1929-1945)  --Postwar United States (1945- early 1970s)  --Contemporary United States (1968-present)</p> <p><b>4b-</b> Students will develop an understanding of recent and modern world history and its connection to United States history, including:  --Intensified hemispheric interactions (1,000-1,500 AD)  --Explorations, contact, and interactions across the world (1450-1770)  --Revolutions, ideologies, and technological change (1750-1914)  --The 20th Century world (1900-present)</p>	<p>political, and economic change in the United States.</p> <p>European leaders opposed most of Wilson’s peace plan, and the U.S. Senate failed to ratify the peace treaty.</p>	<p>Students will be able to explain how the war began and why the United States became involved.</p>	
<p><b>Unit Seven: The 1920s and the Great Depression</b>  <b>Timeline: 19-20 classes</b></p>			
<p><b>Standard 1-</b> Students will employ chronological concepts in analyzing historical phenomena [Chronology]</p> <p><b>1a-</b>Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.</p> <p><b>Standard 2 -</b> Students will gather, examine, and analyze historical data.</p> <p><b>2a-</b> Students will develop and implement effective research strategies for investigating a</p>	<p>A desire for normality after the war and a fear of communism and “foreigners” led to the postwar isolationism.</p> <p>The Harding administration appealed to America’s desire for calm and peace after the war, but resulted in scandal. Consumer goods fueled the business boom of the 1920s as America’s standard of living soared.</p> <p>Americans experienced cultural</p>	<p><b>Essential Questions:</b>  What political and social change took place after World War I and through the 1920s?</p> <p>How did newfound prosperity change American life in the 1920s?</p> <p>What were the causes and consequences of the Great Depression?</p> <p>How did the government’s reaction to the Great Depression</p>	<p><b>Suggested Summative Assessments:</b>  Online test preparation  Self-assessment activities  Vocabulary  Critical thinking questions  Guided reading workbook  Skillbuilder activities  Extension activities</p> <p><b>Suggested Formative Assessments:</b>  Lesson assessments  Chapter assessments  Formal unit assessments  Research of a powerful post war figure and present findings in an editorial</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>given historical topic.</p> <p><b>2b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.</p> <p><b>Standard 3 -</b> Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p> <p><b>Standard 4-</b> Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content].</p> <p><b>4a-</b> Students will develop an understanding of modern United States history, its connections to both Delaware and world history, including:  --Civil War and Reconstruction (1850-1877)  --Development of an industrialized nation (1870-1900)  --Emergence of modern America (1890-1930)  --Great Depression and World War II (1929-1945)  --Postwar United States (1945- early 1970s)  --Contemporary United States (1968-present)</p> <p><b>4b-</b> Students will develop an understanding of recent and modern world history and its connection to United States history, including:</p>	<p>conflicts as customs and values changed in the 1920s.</p> <p>American women pursued new lifestyles and assumed new jobs and different roles in society during the 1920s.</p> <p>African-American ideas, politics, art, literature, and music flourished in Harlem and elsewhere in the United States. As the prosperity of the 1920s ended, severe economic problems gripped the nation.</p> <p>During the Great Depression Americans did what they had to do to survive.</p> <p>President Hoover’s conservative response to the Great Depression drew criticism from many Americans.</p> <p>After becoming president, Franklin Delano Roosevelt used government programs to combat the Depression.</p> <p>New Deal policies and actions affected various social and ethnic groups.</p> <p>Motion pictures, radio, art, and literature blossomed during the New Deal.</p>	<p>affect the United States?</p> <p><b><u>Learning Targets:</u></b>  Students will be able to identify the issues that troubled Americans in the years after World War I.</p> <p>Students will be able to identify the economic developments that took place in the 1920s.</p> <p>Students will be able to describe the difference between urban and rural areas.</p> <p>Students will be able to consider the influence of popular culture, mass media, and cultural movements such as the Harlem Renaissance.</p> <p>Students will be able to identify the weaknesses in the American economy exposed by the 1929 stock market crash.</p> <p>Students will be to outline the actions taken by President Hoover to combat the Great Depression and consider how successful they were.</p> <p>Students will be able to explain how the New Deal attempted to solve the problems of the Great Depression.</p>	<p>Rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
--Intensified hemispheric interactions (1,000-1,500 AD) --Explorations, contact, and interactions across the world (1450-1770) --Revolutions, ideologies, and technological change (1750-1914) -The 20th Century world (1900-present)			
<b>Unit Eight : Historical Research -( Delaware Model Unit)</b> <b>Timeline: 10 classes</b>			
<u><b>Standard Two-</b></u> Students will gather, examine, and analyze historical data.  <b>9-12a:</b> Students will develop and implement effective research strategies for investigating a given historical topic.  <b>9-12b:</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical facts and historical interpretations.	Every citizen must critically examine points of view for how the author uses his or her sources.  Historians insert interpretations when there is a lack of resources.  Critical investigation demands constant reassessment of one’s research strategies.	<u><b>Essential Questions:</b></u> Does differentiating between fact and interpretation matter?  What causes an individual to impact history?	<u><b>Suggested Summative Assessments:</b></u> Participation in class discussions  <u><b>Suggested Formative Assessments:</b></u> process paper annotated bibliography Formative assessment is embedded into the lessons through the Checks for Understanding.
<b>Unit Nine: World War II and Its Aftermath</b> <b>Timeline: 20-21 classes</b>			
<b>Standard 1-</b> Students will employ chronological concepts in analyzing historical phenomena [Chronology].  <b>1a-</b> Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.  <b>Standard 2 -</b> Students will gather, examine, and analyze historical data. <b>2a-</b> Students will develop and implement	The rise of rulers with total power in Europe and Asia led to World War II.  Using the sudden mass attack called <i>blitzkrieg</i> ; Germany invaded and quickly conquered many European countries.  During the Holocaust, the Nazis systematically executed 6 million Jews and 5 million “non-Aryans.”	<u><b>Essential Questions:</b></u> How did the rise of dictators contribute to the outbreak of World War II?  How did the United States use its resources to win World War II?  What international and domestic tensions resulted from the Cold War?  What economic, social, and	<u><b>Suggested Summative Assessments:</b></u> Online test preparation Self-assessment activities Vocabulary Critical thinking questions Guided reading workbook Skillbuilder activities Extension activities <u><b>Suggested Formative Assessments:</b></u> Lesson assessments Chapter assessments Formal unit assessments Primary source research and analysis

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>effective research strategies for investigating a given historical topic.</p> <p><b>2b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.</p> <p><b>Standard 3 -</b> Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p> <p><b>Standard 4-</b> Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content].</p> <p><b>4a-</b> Students will develop an understanding of modern United States history, its connections to both Delaware and world history, including:  --Civil War and Reconstruction (1850-1877)  --Development of an industrialized nation (1870-1900)  --Emergence of modern America (1890-1930)  --Great Depression and World War II (1929-1945)  --Postwar United States (1945- early 1970s)  --Contemporary United States (1968-present)</p> <p><b>4b-</b> Students will develop an understanding of recent and modern world history and its</p>	<p>In response to the fighting in Europe, the United States provided economic and military aid to help the Allies achieve victory.</p> <p>Following the attack on Pearl Harbor, the United States mobilized for war.</p> <p>In order to defeat Japan and end the war in the Pacific, the United States unleashed a terrible new weapon, the atomic bomb.</p> <p>After World War II, Americans adjusted to a new economic opportunities and harsh social tensions.  The United States and the Soviet Union emerged from World War II as two “superpowers” with vastly different political and economic systems.  After World War II, China became a communist nation and Korea was split into a communist north and a democratic south.</p> <p>During the 1950s, the United States and the Soviet Union came to the brink of nuclear war.</p>	<p>political changes occurred in the postwar United States?</p> <p><b><u>Learning Targets:</u></b>  Students will be able to explain how totalitarian rulers rose to power in Europe and Asia.</p> <p>Students will be able to describe how the United States became involved in World War II.</p> <p>Students will be able to discuss the wartime mobilization of various industries.</p> <p>Students will analyze the war’s effects on the home front.</p> <p>Students will be able to discuss the causes and outcomes of the Korean War.</p> <p>Students will be able to describe how the Cold War affected life in the United States.</p>	

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
connection to United States history, including: --Intensified hemispheric interactions (1,000-1,500 AD) --Explorations, contact, and interactions across the world (1450-1770) --Revolutions, ideologies, and technological change (1750-1914) --The 20th Century world (1900-present)	The Truman and Eisenhower administrations led the nation to make social, economic, and political adjustments following World War II.  Mainstream Americans, as well as the nation’s subcultures, embraced new forms of entertainment during the 1950s.  Amidst the prosperity of the 1950s, millions of Americans lived in poverty.		
<b>Unit Ten: Analyzing Historical Data- (Delaware Model Unit)</b> <b>Timeline: 10 classes</b>			
<b>Standard 2-</b> Students will gather, examine, and analyze historical data [Analysis].  <b>9-12b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical facts and historical interpretations.	Historians derive their interpretations of the past from multiple, sometimes conflicting, sources.  Historians must prove where the information can be found that is the basis for historical conclusions.	<u><b>Essential Questions:</b></u> Why does differentiating between fact and interpretation matter?  Why is it necessary to consult multiple sources when studying the past?	<u><b>Suggested Summative Assessments:</b></u> Student Self-Assessment and Reflection Checks for understanding, Critical Thinking activities Extension activities  <u><b>Suggested Formative Assessments:</b></u> Performance Task Rubrics
<b>Unit Eleven: Living with Great Turmoil</b> <b>Timeline: 18-19 classes</b>			
<b>Standard 1-</b> Students will employ chronological concepts in analyzing historical phenomena [Chronology]  <b>1a-</b> Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical	The Kennedy administration faced some of the most dangerous Soviet confrontations in American history.  While Kennedy had trouble getting ideas for a New Frontier	<u><b>Essential Questions:</b></u> What were the achievements and challenges of the Kennedy and Johnson administrations?  In what ways did African Americans fight discrimination during the civil rights era?	<u><b>Suggested Summative Assessments:</b></u> Online test preparation Self-assessment activities Vocabulary Critical thinking questions Guided reading workbook Skillbuilder activities Extension activities

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>continuity and change. <b>Standard 2</b> - Students will gather, examine, and analyze historical data.</p> <p><b>2a-</b> Students will develop and implement effective research strategies for investigating a given historical topic.</p> <p><b>2b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.</p> <p><b>Standard 3</b> - Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p> <p><b>Standard 4-</b> Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content].</p> <p><b>4a-</b> Students will develop an understanding of modern United States history, its connections to both Delaware and world history, including:  --Civil War and Reconstruction (1850-1877)  --Development of an industrialized nation (1870-1900)  --Emergence of modern America (1890-1930)  --Great Depression and World War II (1929-1945)</p>	<p>passed, several goals were achieved.</p> <p>The demand for reform helped create a new awareness of social problems, especially on matters of civil rights and the effects of poverty.</p> <p>Activism and a series of Supreme Court decisions advanced equal rights for African Americans in the 1950s and 1960s. Civil rights activists broke through racial barriers. Their activism prompted landmark legislation.</p> <p>Disagreements among civil rights groups and the rise of black nationalism created a violent period in the fight for civil rights.</p> <p>To stop the spread of communism in Southeast Asia, the United States used its military to support South Vietnam.</p> <p>An antiwar movement in the U.S. pitted supporters of the government’s war policy against those who opposed it.</p> <p>An enemy attack in a chaotic political convention made 1968</p>	<p>What were the military and political events of the Vietnam War and how did this conflict impact life in the United States?</p> <p>Why did social protests and calls for change sweep across the United States in the 1960s?</p> <p><b>Learning Targets:</b>  Students will be able to discuss the foreign policy challenges that President Kennedy faced.</p> <p>Students will be able to describe President Johnson’s Great Society.</p> <p>Students will be able to explain early efforts to end segregation.</p> <p>Students will be able to analyze the victories of the civil rights movement.</p> <p>Students will be able to discuss how the civil rights movement changed over time.</p> <p>Students will be able to explain how the United States became involved in the conflict in Vietnam.</p> <p>Students will be able to discuss the impact the fighting in Vietnam had on American</p>	<p><b>Suggested Formative Assessments:</b>  Lesson assessments  Chapter assessments  Formal unit assessments</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>--Postwar United States (1945- early 1970s) --Contemporary United States (1968-present)</p> <p><b>4b-</b> Students will develop an understanding of recent and modern world history and its connection to United States history, including: --Intensified hemispheric interactions (1,000-1,500 AD) --Explorations, contact, and interactions across the world (1450-1770) --Revolutions, ideologies, and technological change (1750-1914) -The 20th Century world (1900-present)</p>	<p>an explosive year.</p> <p>President Nixon instituted his Vietnamization policy, and America longest war finally came to an end. Latinos and Native Americans confronted injustices in the 1960s.</p> <p>Through protest and marches, women confronted social and economic barriers in American society.</p> <p>The ideals and lifestyle of the counterculture challenged the traditional views of Americans.</p>	<p>society.</p> <p>Students will be able to identify the war’s lasting effects on the United States.</p> <p>Students will be able to explain how Latinos and Native Americans confronted injustices.</p> <p>Students will be able to describe the ways in which countercultures challenged traditional American values.</p>	
<p><b>Unit Twelve: Passage to a New Century</b> <b>Timeline: 15-16 classes</b></p>			
<p><b>Standard 1-</b> Students will employ chronological concepts in analyzing historical phenomena [Chronology]</p> <p><b>1a-</b>Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.</p> <p><b>Standard 2 -</b> Students will gather, examine, and analyze historical data.</p> <p><b>2a-</b> Students will develop and implement effective research strategies for investigating a given historical topic.</p>	<p>President Richard M. Nixon tried to steer the country in a conservative direction and away from federal control.</p> <p>President Nixon’s involvement in the Watergate scandal forced him to resign from office.</p> <p>The Ford and Carter administrations attempted to remedy the nation’s worst economic crisis in decades.</p> <p>During the 1970s, efforts to address the nation’s environmental problems.</p>	<p><b><u>Essential Questions:</u></b> What were the political, social, and economic events of the 1970s?</p> <p>What were the key political and social events of the 1980s and early 1990s?</p> <p>What are the most important issues that affect the United States and the world today?</p> <p><b><u>Learning Targets:</u></b> Students will be able to outline the domestic and foreign policies that President Nixon followed.</p>	<p><b><u>Suggested Summative Assessments:</u></b> Online test preparation Self-assessment activities Vocabulary Critical thinking questions Guided reading workbook Skillbuilder activities</p> <p><b><u>Suggested Formative Assessments:</u></b> Chapter assessments Formal unit assessments Primary Source research and presentation Rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p><b>2b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.</p> <p><b>Standard 3</b> - Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p> <p><b>Standard 4-</b> Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content].</p> <p><b>4a-</b> Students will develop an understanding of modern United States history, its connections to both Delaware and world history, including:  --Civil War and Reconstruction (1850-1877)  --Development of an industrialized nation (1870-1900)  --Emergence of modern America (1890-1930)  --Great Depression and World War II (1929-1945)  --Postwar United States (1945- early 1970s)  --Contemporary United States (1968-present)</p> <p><b>4b-</b> Students will develop an understanding of recent and modern world history and its connection to United States history, including:  --Intensified hemispheric interactions (1,000-1,500 AD)</p>	<p>Conservatism reached a high point with the election in 1980 of President Ronald Reagan and Vice-President George Bush.</p> <p>Presidents Reagan and Bush pursued a conservative agenda that included tax cuts, budget cuts, and increased defense spending.</p> <p>Beneath the surge of prosperity that marked the conservative era of the 1980s lay serious social problems.</p> <p>The Cold War, marked by the breakup of the Soviet Union in 199, led to a redirection of many U.S. goals and policies.</p> <p>The nation became divided as the Democrats gained control of the White House in the 1990s, and the Republicans came to power at the beginning of the new millennium.</p> <p>Because of technological advances and new trade laws, the U.S. economy underwent a boom during the late 20<sup>th</sup> century.</p> <p>Advances in technology have increased not only the pace but also the comfort of many daily lives.</p>	<p>Students will be able to explain how the Watergate scandal led to President Nixon’s resignation.</p> <p>Students will be able to identify the challenges that the Ford and Carter administrations faced.</p> <p>Students will be able to discuss the new conservatism that emerged with the elections of Reagan and Bush.</p> <p>Students will be able to describe the social concerns of the 1980s.</p> <p>Students will be able to explain how changes throughout the world affected U.S. foreign policy.</p> <p>Students will be able to explain why divisions developed in the country at the beginning of the new millennium.</p> <p>Students will be able to describe the basis of the economic boom in the late 20<sup>th</sup> century.</p> <p>Students will be able to demonstrate how technological developments have affected life in the United States.</p> <p>Students will be able to discuss the changes that took place in the make-up of the American population at the turn of the 21<sup>st</sup></p>	

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
--Explorations, contact, and interactions across the world (1450-1770) --Revolutions, ideologies, and technological change (1750-1914) --The 20th Century world (1900-present)	At the end of the 20 <sup>th</sup> century, the U.S. population grew more diverse both in ethnic background and in age.	century.	

## Curriculum Framework for Advanced Placement U.S. History

School: Newark Charter School

Curricular Tool: The Americans – Holt McDougal

Grade: 11

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit One: American Beginnings to 1783</b>			
<b>Timeline : 19-20 classes</b>			
<p><b>Standard 1-</b> Students will employ chronological concepts in analyzing historical phenomena [Chronology]</p> <p><b>1a-</b> Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.</p> <p><b>Standard 2 -</b> Students will gather, examine, and analyze historical data.</p> <p><b>2a-</b> Students will develop and implement effective research strategies for investigating a given historical topic.</p> <p><b>2b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.</p> <p><b>Standard 3 -</b> Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p>	<p>In ancient times, migrating peoples settled the America’s, where their descendant developed complex societies.</p> <p>The varied landscapes of North America encouraged the diversity of Native American culture.</p> <p>Columbus’ voyages set off a chain of events that brought together the peoples of Europe, Africa, and the Americas.</p> <p>Throughout the 1500s and 1600s, the Spanish conquered Central and portions of North America.</p> <p>The first permanent English settlement in North America was founded at Jamestown, Virginia in 1607.</p> <p>The Dutch settled New Netherlands; English Quakers led by William Penn settled Pennsylvania.</p> <p>England and its largely self-</p>	<p><b>Essential Questions:</b></p> <p>What were the motives for exploration?</p> <p>What made the colonies different?</p> <p>How did the convergence of peoples from North America, Africa, and Europe affect the culture?</p> <p>How did Native American culture clash with European?</p> <p>What were the reasons for European colonization of the Americas and how did the original 13 English colonies take hold in what is now the United States?</p> <p>How did the colonies develop economically, socially, and politically?</p> <p>What were the causes and major events of the American revolution and who were the significant individuals involve in the</p>	<p><b>Suggested Formative Assessment:</b></p> <p>Online test preparation Self-assessment activities Vocabulary Critical thinking questions Guided reading workbook Skill builder activities Debates Participation in oral class discussions</p> <p><b>Suggested Formative Assessment:</b></p> <p>Chapter assessments Formal unit assessments Essays Rubrics Primary Source Research Projects</p> <p>*Advanced Placement Exam</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p><b>Standard 4-</b> Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history.</p> <p><b>4b-</b> Students will develop an understanding of recent and modern world history and its connection to United States history, including:  --Intensified hemispheric interactions (1,000-1,500 AD)  --Explorations, contact, and interactions across the world (1450-1770)  --Revolutions, ideologies, and technological change (1750-1914)  --The 20th Century world (1900-present)</p>	<p>governing colonies prospered under a mutually beneficial trade relationship.</p> <p>Conflict between Great Britain and the American colonies grew over issues of taxation, representation, and liberty.</p> <p>Strategic victories in the south and at Yorktown enabled the Americans to defeat the British.</p>	<p>conflict?</p> <p>Did new liberal ideology drive the American Revolution?</p> <p><b><u>Learning Targets:</u></b>  Students will be able to discuss the development and growth of early societies in the Americas.</p> <p>Students will be able to analyze the effects of European exploration on Europeans, Africans, and Native Americans.</p> <p>Students will be able to describe how the Spanish conquered Native American peoples.</p> <p>Students will be able to describe the Northern and Southern colonies and explain how they differed.</p> <p>Students will analyze how the French and Indian War affected the colonies.</p> <p>Students will be able to explain why the colonists fought for independence from Great Britain.</p>	
<p><b>Primary Source Readings:</b> “A Modell of Christian Charity” John Winthrop (1630)  <i>The Captivity Narrative of Mary Rowlandson</i> (1682)</p>			

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit Two: A New Nation</b> <b>Timeline: 12-15 classes</b>			
<p><b>Standard 1-</b> Students will employ chronological concepts in analyzing historical phenomena [Chronology]</p> <p><b>1a-</b> Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.</p> <p><b>Standard 2 -</b> Students will gather, examine, and analyze historical data.</p> <p><b>2a-</b> Students will develop and implement effective research strategies for investigating a given historical topic.</p> <p><b>2b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.</p> <p><b>Standard 3 -</b> Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p> <p><b>Standard 4-</b> Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history.</p> <p><b>4b-</b> Students will develop an understanding of</p>	<p>Americans adopted the Articles of Confederation but found the new government too weak to solve the nation’s problems. During the debate on the constitution, the Federalist promised to add a bill of rights in order to get the constitution ratified.</p> <p>President Washington transformed the ideas of the Constitution into a real government.</p> <p>The United States expanded its borders during Thomas Jefferson’s administration.</p> <p>The North and South developed economic systems that led to political differences between the regions.</p> <p>Andrew Jackson’s policies spoke for the common people but violated Native American rights.</p> <p>Slavery became an explosive issue, as many Americans joined reformers working to put an end to it.</p> <p>Women reformers expanded their efforts from movements</p>	<p><b>Essential Questions:</b></p> <p>What challenges did the new American republic face, and how did the U.S. Constitution reflect those challenges?</p> <p>What major domestic and foreign problems faced the leaders of the new Republic?</p> <p>Who were the leaders of the federalists, democrats, and republicans? And what did they believe in as people &amp; political parties?</p> <p>How did regional differences contribute to the growing conflict over states’ rights versus federal power?</p> <p>What were the causes and effects of the Second Great Awakening and the various reform movements that swept the nation in the first half of the 19<sup>th</sup> century?</p> <p>Was the election of President Jackson a true shift of power to the “Common” American and the newly expanded “West”?</p> <p><b>Learning Targets:</b> Students will describe he</p>	<p><b>Suggested Formative Assessment:</b></p> <p>Online test preparation Self-assessment activities Vocabulary Critical thinking questions Guided reading workbook Skill builder activities Debates Participation in oral class discussions</p> <p><b>Suggested Formative Assessment:</b></p> <p>Chapter assessments Formal unit assessments Essays Rubrics Primary Source Research Projects</p> <p>*Advanced Placement Exam</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>recent and modern world history and its connection to United States history, including:</p> <ul style="list-style-type: none"> <li>--Intensified hemispheric interactions (1,000-1,500 AD)</li> <li>--Explorations, contact, and interactions across the world (1450-1770)</li> <li>--Revolutions, ideologies, and technological change (1750-1914)</li> <li>--The 20th Century world (1900-present)</li> </ul>	<p>such as abolition and temperance to include women's rights.</p>	<p>problems faced by the Confederation.</p> <p>Students will be able to contrast the Federalist and Antifederalist arguments over the Constitution.</p> <p>Students will be able to explain why the United States needed to establish new government traditions.</p> <p>Students will be able to describe the challenges at home and abroad that led the United States to declare war on Great Britain.</p> <p>Students will be able to identify the economic differences among different regions of the United States.</p> <p>Students will be able to describe the conflict over states' rights.</p> <p>Students will be able to identify how the campaigns for abolition and for equality for women were linked.</p>	
<p><b>Primary Source Readings:</b> <i>The Federalist Papers</i> (1787-1788)  George Washington's Farewell Address (1796)  Thomas Jefferson's First Inaugural Address (1801)  <i>Narrative of the Life of Frederick Douglass, an American Slave, Written by Himself</i> (1845)  The Seneca Falls Declaration of Sentiments and Resolutions (1848)</p>			

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit Three: An Era of Growth and Disunion (Delaware Model Unit – Changing Interpretations of Reconstruction)</b> <b>Timeline: 12-15 classes</b>			
<p><b>Standard 1-</b> Students will employ chronological concepts in analyzing historical phenomena [Chronology]</p> <p><b>1a-</b>Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.</p> <p><b>Standard 2 -</b> Students will gather, examine, and analyze historical data.</p> <p><b>2a-</b> Students will develop and implement effective research strategies for investigating a given historical topic.</p> <p><b>2b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.</p> <p><b>Standard 3 -</b> Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p> <p><b>Standard 4-</b> Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content].</p>	<p>Technological changes created greater interaction and more economic diversity among the regions of the nation.</p> <p>Mexico offered land grants to American settlers, but conflict developed over religion and other cultural differences, and the issue of slavery.</p> <p>Tensions over the annexation of Texas led to war with Mexico, resulting in huge territorial gains for the United States.</p> <p>The issue of slavery dominated U.S. politics in the early 1850s.</p> <p>In the mid-1850s, the issue of slavery and other factors split political parties and led to the birth of new ones.</p> <p>By issuing the Emancipation Proclamation, President Lincoln made slavery the focus of the war.</p> <p>The Civil War brought about dramatic social and economic changes in American Society.</p> <p>Congress opposed Lincoln’s and Johnson’s plans for Reconstruction and instead implemented its own plan to</p>	<p><b>Essential Questions:</b></p> <p>What role did transportation play in the growth of the U.S. economy?</p> <p>What were the causes and consequences of westward expansion?</p> <p>Did war with Mexico uncover deep rooted sectional differences? What were the political ramifications of Dred Scott?</p> <p>Why were there so many views of slavery?</p> <p>Was it necessary for the South to secede based on Lincoln’s election?</p> <p>How did conflict over slavery and other regional tensions lead to the Civil War?</p> <p>Was the Abolitionist Movement connected to other reformist? What were the strategies, outcomes, and legacies of the Civil War?</p> <p>What were the political struggles, accomplishments, and failures of Reconstruction in the years following the Civil War?</p>	<p><b>Suggested Formative Assessment:</b></p> <p>Online test preparation Self-assessment activities Vocabulary Critical thinking questions Guided reading workbook Skill builder activities Debates Participation in oral class discussions</p> <p><b>Suggested Formative Assessment:</b></p> <p>Chapter assessments Formal unit assessments Essays Rubrics Primary Source Research Projects</p> <p>*Advanced Placement Exam</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p><b>4a-</b> Students will develop an understanding of modern United States history, its connections to both Delaware and world history, including:</p> <ul style="list-style-type: none"> <li>--Civil War and Reconstruction (1850-1877)</li> <li>--Development of an industrialized nation (1870-1900)</li> <li>--Emergence of modern America (1890-1930)</li> <li>--Great Depression and World War II (1929-1945)</li> <li>--Postwar United States (1945- early 1970s)</li> <li>--Contemporary United States (1968-present)</li> </ul> <p><b>4b-</b> Students will develop an understanding of recent and modern world history and its connection to United States history, including:</p> <ul style="list-style-type: none"> <li>--Intensified hemispheric interactions (1,000-1,500 AD)</li> <li>--Explorations, contact, and interactions across the world (1450-1770)</li> <li>--Revolutions, ideologies, and technological change (1750-1914)</li> <li>--The 20th Century world (1900-present)</li> </ul>	<p>rebuild the South.</p>	<p><b><u>Learning Targets:</u></b></p> <p>Students will be able to identify the effects of technological changes on the nation. Students will be able to explain the concept of manifest destiny and its effect on Native Americans.</p> <p>Students will be able to explain why people living in different regions of the country might have different attitudes and beliefs.</p> <p>Students will be able to describe how Abraham Lincoln came to power and explain why his election in 1860 led to the secession of some southern states.</p> <p>Students will be able to explain how the Civil War ended.</p> <p>Students will be able to summarize the key effects of the Civil War on the society, economy, and politics of the US.</p> <p>Students will be to identify the special challenges that a country might face after a civil war.</p> <p>Students will be able to explain why Reconstruction of the South collapsed.</p>	
<p>Primary Source Readings: John L. O’Sullivan on Manifest Destiny (1839/1845) Henry David Thoreau, “On the Duty of Civil Disobedience” ( 1849) Harriet Jacobs, <i>Incidents in the life of a Slave Girl</i> (1861)</p>			

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit Four: Migration and Industrialization</b> <b>Timeline: 15-18 classes</b>			
<p><b>Standard 1-</b> Students will employ chronological concepts in analyzing historical phenomena [Chronology]</p> <p><b>1a-</b>Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.</p> <p><b>Standard 2 -</b> Students will gather, examine, and analyze historical data.</p> <p><b>2a-</b> Students will develop and implement effective research strategies for investigating a given historical topic.</p> <p><b>2b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.</p> <p><b>Standard 3 -</b> Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p> <p><b>Standard 4-</b> Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content].</p>	<p>The cattle industry boomed in the late 1800s, as the culture of the Plains Indians declined.</p> <p>Farmers united to address their economic problems, giving rise to the Populist movement.</p> <p>At the end of the 19<sup>th</sup> century, natural resources, creative ideas, and growing markets fueled an industrial boom.</p> <p>The expansion of industry resulted in the growth of big business and prompted laborers to form unions to better their lives.</p> <p>Immigration from Europe, Asia, the Caribbean, and Mexico reached a new high in the late 19<sup>th</sup> and early 20<sup>th</sup> century.</p> <p>The rapid growth of cities forced people to contend with problems of housing, transportation, and sanitation.</p> <p>Reforms in public education led to a rise in national literacy and the promotion of public education.</p> <p>As Americans had more time</p>	<p><b>Essential Questions:</b></p> <p>How did Westward migration after the Civil War affect the United States?</p> <p>How much of an effect did the growth of farming, ranching and mining have on the native people of Western U.S.?</p> <p>What is the connection between industrial growth and selected industry like railroads?</p> <p>What impact did scientific discoveries and manufacturing processes have on the nature of work, the American labor movement, and American businesses.</p> <p>Do immigration and urbanization go hand and hand with industrialization?</p> <p>What were the economic, social, and political effects of immigration?</p> <p>What were the significant trends in areas such as technology, education, race relations, and mass culture at the turn of the 20<sup>th</sup> century?</p>	<p><b>Suggested Formative Assessment:</b></p> <p>Online test preparation Self-assessment activities Vocabulary Critical thinking questions Guided reading workbook Skill builder activities Debates Participation in oral class discussions</p> <p><b>Suggested Formative Assessment:</b></p> <p>Chapter assessments Formal unit assessments Essays Rubrics Primary Source Research Projects</p> <p>*Advanced Placement Exam</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p><b>4a-</b> Students will develop an understanding of modern United States history, its connections to both Delaware and world history, including:</p> <ul style="list-style-type: none"> <li>--Civil War and Reconstruction (1850-1877)</li> <li>--Development of an industrialized nation (1870-1900)</li> <li>--Emergence of modern America (1890-1930)</li> <li>--Great Depression and World War II (1929-1945)</li> <li>--Postwar United States (1945- early 1970s)</li> <li>--Contemporary United States (1968-present)</li> </ul> <p><b>4b-</b> Students will develop an understanding of recent and modern world history and its connection to United States history, including:</p> <ul style="list-style-type: none"> <li>--Intensified hemispheric interactions (1,000-1,500 AD)</li> <li>--Explorations, contact, and interactions across the world (1450-1770)</li> <li>--Revolutions, ideologies, and technological change (1750-1914)</li> <li>--The 20th Century world (1900-present)</li> </ul>	<p>for leisure activities, a modern mass culture emerged.</p>	<p><b><u>Learning Targets:</u></b></p> <p>Students will be able to explain the effect of westward expansion on Native Americans. Students will be able to address the rise of the Populist Party.</p> <p>Students will be able to list the developments that helped industries to grow in the late 1880s.</p> <p>Students will be able to explain why workers organized unions and staged labor strikes.</p> <p>Students will be able to describe the challenges of urbanization.</p> <p>Students will be able to describe how scientific and technological developments affected life at the turn of the 20<sup>th</sup> century.</p> <p>Students will be able to discuss what life was like for African-Americans at the turn of the 20<sup>th</sup> century.</p>	
<p><b>Primary Source Readings:</b> Frederick Jackson Turner, “The Significance of the Frontier in American History” (1893) Booker T. Washington, the Atlanta Compromise Speech (1895) Roosevelt Corollary to the Monroe Doctrine (1904-1905)</p>			

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit Five: Modern America Emerges</b> <b>Timeline: 14-16 classes</b>			
<p><b>Standard 1-</b> Students will employ chronological concepts in analyzing historical phenomena [Chronology]</p> <p><b>1a-</b> Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.</p> <p><b>Standard 2 -</b> Students will gather, examine, and analyze historical data.</p> <p><b>2a-</b> Students will develop and implement effective research strategies for investigating a given historical topic.</p> <p><b>2b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.</p> <p><b>Standard 3 -</b> Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p> <p><b>Standard 4-</b> Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content].</p>	<p>Political, economic, and social change in the late 19<sup>th</sup> century America led to broad progressive reforms.</p> <p>As president, Theodore Roosevelt worked to give citizens a Square Deal through progressive reforms.</p> <p>Taft’s ambivalent approach to progressive reform led to a split in the Republican party and the loss of the presidency to the Democrats.</p> <p>Woodrow Wilson established a strong reform agenda as a progressive leader.</p> <p>Beginning in 1867 and continuing through the century, global competition caused the United States to expand.</p> <p>In 1898, the United States went to war to help Cuba win its independence from Spain.</p> <p>The Russo-Japanese War, the Panama Canal, and the Mexican Revolution added to America’s military and economic power.</p> <p>As World War I intensified, the</p>	<p><b>Essential Questions:</b></p> <p>How did the progressive movement try to bring about social change?</p> <p>Which individuals and events moved the United States into the role of a world power?</p> <p>What factors made it different and which factors made it a success, to go from an isolationist nation to an imperialist nation?</p> <p>How did World War I affect the United States and Europe?</p> <p>Was the progressive era a success?</p> <p>How did Taft, Wilson and Roosevelt differ as presidents?</p> <p>Did Wilson and the U.S. help win WWI but lose the peace thru the Versailles Treaty?</p> <p>What was the purpose of the League of Nations?</p> <p><b>Learning Targets:</b></p> <p>Students will be able to explain how the progressive movement increased the power of government to bring about reform.</p>	<p><b>Suggested Formative Assessment:</b></p> <p>Online test preparation Self-assessment activities Vocabulary Critical thinking questions Guided reading workbook Skill builder activities Debates Participation in oral class discussions</p> <p><b>Suggested Formative Assessment:</b></p> <p>Chapter assessments Formal unit assessments Essays Rubrics Primary Source Research Projects</p> <p>*Advanced Placement Exam</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p><b>4a-</b> Students will develop an understanding of modern United States history, its connections to both Delaware and world history, including:  --Civil War and Reconstruction (1850-1877)  --Development of an industrialized nation (1870-1900)  --Emergence of modern America (1890-1930)  --Great Depression and World War II (1929-1945)  --Postwar United States (1945- early 1970s)  --Contemporary United States (1968-present)</p> <p><b>4b-</b> Students will develop an understanding of recent and modern world history and its connection to United States history, including:  --Intensified hemispheric interactions (1,000-1,500 AD)  --Explorations, contact, and interactions across the world (1450-1770)  --Revolutions, ideologies, and technological change (1750-1914)  --The 20th Century world (1900-present)</p>	<p>United States was forced to abandon it neutrality.</p> <p>World War I spurred social, political, and economic change in the United States.</p> <p>European leaders opposed most of Wilson’s peace plan, and the U.S. Senate failed to ratify the peace treaty.</p>	<p>Students will be able to describe the efforts brought about to regulate business and protect individuals.</p> <p>Students will be able to explain the economic and cultural factors that fueled the growth of American Imperialism.</p> <p>Students will be able to describe how the United States acquired Alaska and the take-over of the Hawaiian Islands.</p> <p>Students will be able to analyze the social changes in the United States that were accelerated by the war.</p> <p>Students will be able to explain how the war began and why the United States became involved.</p>	
<p><b>Primary Source Readings:</b> Jane Addams, <i>Twenty Years at Hull-House</i> (1910)  Wilson’s Fourteen Points Speech (1918)</p>			
<p><b>Unit Six: The 1920s and the Great Depression ( Delaware Model Unit – Historical Research)</b>  <b>Timeline: 17-19 classes</b></p>			
<p><b>Standard 1-</b> Students will employ chronological concepts in analyzing historical phenomena [Chronology]</p> <p><b>1a-</b>Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of</p>	<p>A desire for normality after the war and a fear of communism and “foreigners” led to the postwar isolationism.</p> <p>The Harding administration appealed to America’s desire</p>	<p><b>Essential Questions:</b>  What political and social change took place after World War I and through the 1920s?</p> <p>How did newfound prosperity change American life in the</p>	<p><b>Suggested Formative Assessment:</b>  Online test preparation  Self-assessment activities  Vocabulary  Critical thinking questions  Guided reading workbook  Skill builder activities</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>time in order to explain patterns of historical continuity and change.</p> <p><b>Standard 2</b> - Students will gather, examine, and analyze historical data.</p> <p><b>2a-</b> Students will develop and implement effective research strategies for investigating a given historical topic.</p> <p><b>2b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.</p> <p><b>Standard 3</b> - Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p> <p><b>Standard 4-</b> Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content].</p> <p><b>4a-</b> Students will develop an understanding of modern United States history, its connections to both Delaware and world history, including:  --Civil War and Reconstruction (1850-1877)  --Development of an industrialized nation (1870-1900)  --Emergence of modern America (1890-1930)</p>	<p>for calm and peace after the war, but resulted in scandal. Consumer goods fueled the business boom of the 1920s as America’s standard of living soared.</p> <p>Americans experienced cultural conflicts as customs and values changed in the 1920s.</p> <p>American women pursued new lifestyles and assumed new jobs and different roles in society during the 1920s.</p> <p>African-American ideas, politics, art, literature, and music flourished in Harlem and elsewhere in the United States.</p> <p>As the prosperity of the 1920s ended, severe economic problems gripped the nation.</p> <p>During the Great Depression Americans did what they had to do to survive.</p> <p>President Hoover’s conservative response to the Great Depression drew criticism from many Americans.</p> <p>After becoming president, Franklin Delano Roosevelt used government programs to</p>	<p>1920s?</p> <p>What were the causes and consequences of the Great Depression?</p> <p>What was the ideology of the new deal and the opposition it received?</p> <p>How did the government’s reaction to the Great Depression affect the United States?</p> <p><b><u>Learning Targets:</u></b>  Students will be able to identify the issues that troubled Americans in the years after World War I.</p> <p>Students will be able to identify the economic developments that took place in the 1920s.</p> <p>Students will be able to describe the difference between urban and rural areas.</p> <p>Students will be able to consider the influence of popular culture, mass media, and cultural movements such as the Harlem Renaissance.</p> <p>Students will be able to identify the weaknesses in the American economy exposed by the 1929 stock market crash.</p>	<p>Debates Participation in oral class discussions</p> <p><b><u>Suggested Formative Assessment:</u></b>  Chapter assessments  Formal unit assessments  Essays  Rubrics  Primary Source Research  Projects  *Advanced Placement Exam</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>--Great Depression and World War II (1929-1945) --Postwar United States (1945- early 1970s) --Contemporary United States (1968-present)</p> <p><b>4b-</b> Students will develop an understanding of recent and modern world history and its connection to United States history, including: --Intensified hemispheric interactions (1,000-1,500 AD) --Explorations, contact, and interactions across the world (1450-1770) --Revolutions, ideologies, and technological change (1750-1914) -The 20th Century world (1900-present)</p>	<p>combat the Depression.</p> <p>New Deal policies and actions affected various social and ethnic groups.</p> <p>Motion pictures, radio, art, and literature blossomed during the New Deal.</p>	<p>Students will be to outline the actions taken by President Hoover to combat the Great Depression and consider how successful they were.</p> <p>Students will be able to explain how the New Deal attempted to solve the problems of the Great Depression.</p>	
<p><b>Primary Source Readings:</b> Anzia Yeziarska, <i>Bread Givers</i> (1925) Herbert Hoover’s Inaugural Address (1929) Franklin D. Roosevelt’s First Inaugural Address (1933)</p>			
<p><b>Unit Seven: World War II and Its Aftermath</b> <b>Timeline: 18-20 classes</b></p>			
<p><b>Standard 1-</b> Students will employ chronological concepts in analyzing historical phenomena [Chronology].</p> <p><b>1a-</b>Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.</p> <p><b>Standard 2 -</b> Students will gather, examine, and analyze historical data.</p> <p><b>2a-</b> Students will develop and implement effective research strategies for investigating a</p>	<p>The rise of rulers with total power in Europe and Asia led to World War II.</p> <p>Using the sudden mass attack called <i>blitzkrieg</i>; Germany invaded and quickly conquered many European countries. During the Holocaust, the Nazis systematically executed 6 million Jews and 5 million “non-Aryans.”</p> <p>In response to the fighting in Europe, the United States</p>	<p><b>Essential Questions:</b> How did the rise of dictators contribute to the outbreak of World War II?</p> <p>How did the United States use its resources to win World War II? What international and domestic tensions resulted from the Cold War?</p> <p>What economic, social, and political changes occurred in the postwar United States?</p>	<p><b>Suggested Formative Assessment:</b> Online test preparation Self-assessment activities Vocabulary Critical thinking questions Guided reading workbook Skill builder activities Debates Participation in oral class discussions</p> <p><b>Suggested Formative Assessment:</b> Chapter assessments Formal unit assessments Essays Rubrics</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>given historical topic.</p> <p><b>2b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.</p> <p><b>Standard 3 -</b> Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p> <p><b>Standard 4-</b> Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content].</p> <p><b>4a-</b> Students will develop an understanding of modern United States history, its connections to both Delaware and world history, including:  --Civil War and Reconstruction (1850-1877)  --Development of an industrialized nation (1870-1900)  --Emergence of modern America (1890-1930)  --Great Depression and World War II (1929-1945)  --Postwar United States (1945- early 1970s)  --Contemporary United States (1968-present)</p> <p><b>4b-</b> Students will develop an understanding of recent and modern world history and its connection to United States history, including:</p>	<p>provided economic and military aid to help the Allies achieve victory.</p> <p>Following the attack on Pearl Harbor, the United States mobilized for war.</p> <p>In order to defeat Japan and end the war in the Pacific, the United States unleashed a terrible new weapon, the atomic bomb.</p> <p>After World War II, Americans adjusted to a new economic opportunities and harsh social tensions.</p> <p>The United States and the Soviet Union emerged from World War II as two “superpowers” with vastly different political and economic systems.</p> <p>After World War II, China became a communist nation and Korea was split into a communist north and a democratic south.</p> <p>During the 1950s, the United States and the Soviet Union came to the brink of nuclear war.</p> <p>The Truman and Eisenhower</p>	<p>How did the League of Nations compare to the United Nations?</p> <p>Was the Cold War avoidable?</p> <p>Was the Korean War an extension of the Containment Policy?</p> <p><b><u>Learning Targets:</u></b>  Students will be able to explain how totalitarian rulers rose to power in Europe and Asia.</p> <p>Students will be able to describe how the United States became involved in World War II.</p> <p>Students will be able to discuss the wartime mobilization of various industries.</p> <p>Students will analyze the war’s effects on the home front.</p> <p>Students will be able to discuss the causes and outcomes of the Korean War.</p> <p>Students will be able to describe how the Cold War affected life in the United States.</p>	<p>Primary Source Research Projects</p> <p>*Advanced Placement Exam</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
--Intensified hemispheric interactions (1,000-1,500 AD) --Explorations, contact, and interactions across the world (1450-1770) --Revolutions, ideologies, and technological change (1750-1914) --The 20th Century world (1900-present)	administrations led the nation to make social, economic, and political adjustments following World War II.  Mainstream Americans, as well as the nation’s subcultures, embraced new forms of entertainment during the 1950s.  Amidst the prosperity of the 1950s, millions of Americans lived in poverty.		
<b>Primary Source Readings:</b> Franklin Roosevelt, the “Quarantine” Speech (1937) Harry S. Truman, the Truman Doctrine (1947)			
<b>Unit Eight: Living with Great Turmoil (Delaware Model Unit- Analyzing Historical Data)</b> <b>Timeline: 16-18 classes</b>			
<b>Standard 1-</b> Students will employ chronological concepts in analyzing historical phenomena [Chronology]  <b>1a-</b> Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.  <b>Standard 2 -</b> Students will gather, examine, and analyze historical data.  <b>2a-</b> Students will develop and implement effective research strategies for investigating a given historical topic.  <b>2b-</b> Students will examine and analyze primary and secondary sources in order to	The Kennedy administration faced some of the most dangerous Soviet confrontations in American history.  While Kennedy had trouble getting ideas for a New Frontier passed, several goals were achieved.  The demand for reform helped create a new awareness of social problems, especially on matters of civil rights and the effects of poverty.  Activism and a series of Supreme Court decisions	<b>Essential Questions:</b> What were the achievements and challenges of the Kennedy and Johnson administrations?  In what ways did African Americans fight discrimination during the civil rights era?  To what extent did Brown v. Board of Education and reverse Plessy v. Ferguson?  What were the military and political events of the Vietnam War and how did this conflict impact life in the United States?  How did the U.S. fail to reach its	<b>Suggested Formative Assessment:</b> Online test preparation Self-assessment activities Vocabulary Critical thinking questions Guided reading workbook Skill builder activities Debates Participation in oral class discussions  <b>Suggested Formative Assessment:</b> Chapter assessments Formal unit assessments Essays Rubrics Primary Source Research Projects  *Advanced Placement Exam

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>differentiate between historical fact and interpretations.</p> <p><b>Standard 3</b> - Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p> <p><b>Standard 4</b>- Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content].</p> <p><b>4a-</b> Students will develop an understanding of modern United States history, its connections to both Delaware and world history, including:  --Civil War and Reconstruction (1850-1877)  --Development of an industrialized nation (1870-1900)  --Emergence of modern America (1890-1930)  --Great Depression and World War II (1929-1945)  --Postwar United States (1945- early 1970s)  --Contemporary United States (1968-present)</p> <p><b>4b-</b> Students will develop an understanding of recent and modern world history and its connection to United States history, including:  --Intensified hemispheric interactions (1,000-1,500 AD)  --Explorations, contact, and interactions across the world (1450-1770)</p>	<p>advanced equal rights for African Americans in the 1950s and 1960s.</p> <p>Civil rights activists broke through racial barriers. Their activism prompted landmark legislation.</p> <p>Disagreements among civil rights groups and the rise of black nationalism created a violent period in the fight for civil rights.</p> <p>To stop the spread of communism in Southeast Asia, the United States used its military to support South Vietnam.</p> <p>An antiwar movement in the U.S. pitted supporters of the government’s war policy against those who opposed it.</p> <p>An enemy attack in a chaotic political convention made 1968 an explosive year.</p> <p>President Nixon instituted his Vietnamization policy, and America longest war finally came to an end.</p> <p>Latinos and Native Americans confronted injustices in the 1960s.</p>	<p>goals in Vietnam?</p> <p>Why did social protests and calls for change sweep across the United States in the 1960s?</p> <p><b><u>Learning Targets:</u></b>  Students will be able to discuss the foreign policy challenges that President Kennedy faced.</p> <p>Students will be able to describe President Johnson’s Great Society.</p> <p>Students will be able to explain early efforts to end segregation.</p> <p>Students will be able to analyze the victories of the civil rights movement.</p> <p>Students will be able to discuss how the civil rights movement changed over time.</p> <p>Students will be able to explain how the United States became involved in the conflict in Vietnam.</p> <p>Students will be able to discuss the impact the fighting in Vietnam had on American society.</p> <p>Students will be able to identify the war’s lasting effects on the</p>	

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
--Revolutions, ideologies, and technological change (1750-1914) -The 20th Century world (1900-present)	Through protest and marches, women confronted social and economic barriers in American society.  The ideals and lifestyle of the counterculture challenged the traditional views of Americans.	United States.  Students will be able to explain how Latinos and Native Americans confronted injustices.  Students will be able to describe the ways in which countercultures challenged traditional American values.	
<b>Primary Source Readings:</b> John F. Kennedy’s Inaugural Address (1961) The Port Huron Statement (1962) Martin Luther King, Jr., “Letter from a Birmingham Jail” (1963) Lyndon Johnson, “The Great Society” (1966)			
<b>Unit Nine: Passage to a New Century</b> <b>Timeline: 13-15 classes</b>			
<b>Standard 1-</b> Students will employ chronological concepts in analyzing historical phenomena [Chronology]  <b>1a-</b> Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.  <b>Standard 2 -</b> Students will gather, examine, and analyze historical data.  <b>2a-</b> Students will develop and implement effective research strategies for investigating a	President Richard M. Nixon tried to steer the country in a conservative direction and away from federal control.  President Nixon’s involvement in the Watergate scandal forced him to resign from office.  The Ford and Carter administrations attempted to remedy the nation’s worst economic crisis in decades.  During the 1970s, efforts to	<b>Essential Questions:</b> How were Nixon’s foreign policy accomplishments impacted by his domestic failure, Watergate?  What were the political, social, and economic events of the 1970s?  What were the key political and social events of the 1980s and early 1990s?  What are the most important issues that affect the United States	<b>Suggested Formative Assessment:</b> Online test preparation Self-assessment activities Vocabulary Critical thinking questions Guided reading workbook Skill builder activities Debates Participation in oral class discussions  <b>Suggested Formative Assessment:</b> Chapter assessments Formal unit assessments Essays Rubrics

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>given historical topic.</p> <p><b>2b-</b> Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.</p> <p><b>Standard 3 -</b> Students will interpret historical data [Interpretation].</p> <p><b>3a-</b> Students will compare competing historical narratives, by contrasting different historical choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.</p> <p><b>Standard 4-</b> Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content].</p> <p><b>4a-</b> Students will develop an understanding of modern United States history, its connections to both Delaware and world history, including:  --Civil War and Reconstruction (1850-1877)  --Development of an industrialized nation (1870-1900)  --Emergence of modern America (1890-1930)  --Great Depression and World War II (1929-1945)  --Postwar United States (1945- early 1970s)  --Contemporary United States (1968-present)</p> <p><b>4b-</b> Students will develop an understanding of recent and modern world history and its connection to United States history, including:</p>	<p>address the nation’s environmental problems.</p> <p>Conservatism reached a high point with the election in 1980 of President Ronald Reagan and Vice-President George Bush.</p> <p>Presidents Reagan and Bush pursued a conservative agenda that included tax cuts, budget cuts, and increased defense spending.</p> <p>Beneath the surge of prosperity that marked the conservative era of the 1980s lay serious social problems.</p> <p>The Cold War, marked by the breakup of the Soviet Union in 199, led to a redirection of many U.S. goals and policies.</p> <p>The nation became divided as the Democrats gained control of the White House in the 1990s, and the Republicans came to power at the beginning of the new millennium.</p> <p>Because of technological advances and new trade laws, the U.S. economy underwent a book during the late 20<sup>th</sup> century.</p> <p>Advances in technology have</p>	<p>and the world today?</p> <p><b>Learning Targets:</b>  Students will be able to outline the domestic and foreign policies that President Nixon followed.</p> <p>Students will be able to explain how the Watergate scandal led to President Nixon’s resignation.</p> <p>Students will be able to identify the challenges that the Ford and Carter administrations faced.</p> <p>Students will be able to discuss the new conservatism that emerged with the elections of Reagan and Bush.</p> <p>Students will be able to describe the social concerns of the 1980s.</p> <p>Students will be able to explain how changes throughout the world affected U.S. foreign policy.</p> <p>Students will be able to explain why divisions developed in the country at the beginning of the new millennium.</p> <p>Students will be able to describe the basis of the economic boom in the late 20<sup>th</sup> century.</p> <p>Students will be able to</p>	<p>Primary Source Research Projects</p> <p>*Advanced Placement Exam</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
--Intensified hemispheric interactions (1,000-1,500 AD) --Explorations, contact, and interactions across the world (1450-1770) --Revolutions, ideologies, and technological change (1750-1914) --The 20th Century world (1900-present)	increased not only the pace but also the comfort of many daily lives.  At the end of the 20 <sup>th</sup> century, the U.S. population grew more diverse both in ethnic background and in age.	demonstrate how technological developments have affected life in the United States.  Students will be able to discuss the changes that took place in the make-up of the American population at the turn of the 21 <sup>st</sup> century.	
<b>Primary Source Readings:</b> Philip Caputo, <i>A Rumor of War</i> (1976) James Carroll, <i>An American Requiem: God, My Father, and the War that Came Between Us</i> (1996)			

# Curriculum Framework for Physical and Earth Science

School: Newark Charter School

Curricular Tool: Physical Science-Holt

Grade: 9

Standards Alignment	Unit Concept/Big Ideas	Essential Questions/Student Learning Targets	Assessments
<p><b>Unit One: Matter</b> <b>Timeline : 5-7 Days</b></p>			
<p><b>Standard 2:</b> Materials and Their Properties</p> <p><b>Strand 1:</b> Properties and Structure of Materials <b>Substrand B.</b> Elements and compounds are pure substances. Elements cannot be decomposed into simpler materials by chemical reactions. Elements can react to form compounds. Elements and/or compounds may also be physically combined to form mixtures. <b>Substrand G:</b> A change in physical properties does not change the chemical composition of the substance. The physical properties of elements and compounds (such as melting and boiling points) reflect the nature of the interactions among their atoms, ions, or molecules and the electrical forces that exist between them.</p> <p><b>Strand 2:</b> Mixtures and Solutions <b>Substrand B:</b> A variety of methods can be used to separate mixtures into their component parts based upon the chemical and physical properties of the individual components.</p>	<p>The structures of materials determine their properties.</p> <p>The properties of a mixture are based on the properties of its components.</p>	<p>How do physical and chemical properties of matter determine their use?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 9<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>• Elements</li> <li>• Compounds</li> <li>• Mixtures</li> <li>• Physical Properties</li> <li>• Density</li> <li>• Chemical Properties</li> <li>• Physical Changes</li> <li>• Chemical Changes</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Comparing Substances, Page 45</li> <li>• Chemical Formulas, Page 48</li> <li>• Mass of Gaseous Matter, Page 51</li> <li>• Properties of Iron, Page 56</li> <li>• Observing Changes in Matter, Page 59</li> <li>• Identifying a Physical or Chemical Change, Page 61</li> <li>• STEM: Investigate how the data base for paint chemistry is useful in providing information concerning a car crash, Page 57</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Finding Density Lab, Page 43</li> <li>• Mystery Mixture, Page 48</li> <li>• Density of Water, Page 54</li> <li>• Reactivity, Page 58</li> <li>• Can You Separate a Mixture, Page 63</li> <li>• Summative Assessment</li> </ul>

<p><b>Unit Two: Matter and Energy</b>  <b>Timeline: 1-2 Days</b></p>			
<p><b>Standard 2:</b> Materials and Their Properties</p> <p><b>Strand 3:</b> Conservation of Matter  <b>Substrand A:</b> The total mass of the system remains the same regardless of how atoms and molecules in a closed system interact with one another, or how they combine or break apart.</p> <p><b>Standard 3:</b> Energy and Its Effects</p> <p><b>Strand 3:</b> Energy Interacting With Materials  <b>Substrand A:</b> Energy cannot be created nor destroyed. Energy can be transferred from one object to another and can be transformed from one form to another, but the total amount of energy never changes. Recognizing that energy is conserved, the processes of energy transformation and energy transfer can be used to understand the changes that take place in physical systems.</p>	<p>When materials interact within a closed system, the total mass of the system remains the same.</p> <p>Energy readily transforms from one form to another, but these transformations are not always reversible. The details of these transformations depend upon the initial form of the energy and the properties of the materials involved. Energy may transfer into or out of a system and it may change forms, but the total energy cannot change.</p>	<p>Why does the total mass in a closed system stay the same?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 9<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>• Law of Conservation of Matter</li> <li>• Phases of Matter</li> <li>• Phase Changes of Matter,</li> <li>• Kinetic Molecular Theory.</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Motion of Particles, Page 77</li> <li>• Visualizing Particles, Page 79</li> <li>• STEM: Research the differences between deodorants and antiperspirants and investigate how antiperspirants prevent the secretion of perspiration.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Hot or Cold, Page 81</li> <li>• Boiling Water, Page 86</li> <li>• Summative Assessment</li> </ul>
<p><b>Unit Three: Atoms</b>  <b>Timeline: 5-7 Days</b></p>			
<p><b>Standard 2:</b> Materials and Their Properties</p> <p><b>Strand 1:</b> Properties and Structures of Materials, <b>Substrand A:</b> All matter is composed of minute particles called atoms. Most of the mass of an atom is concentrated in the nucleus. In the nucleus, there are neutrons with no electrical charge and positively charged</p>	<p>The structures of materials determine their properties.</p>	<p>Why are atoms called the building blocks of nature?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 9<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>• Isotopes</li> <li>• Protons, Neutrons, Electrons</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Atomic Theory, Page 113</li> <li>• The Structure of Matter Skill Sheets, Page 119</li> <li>• Electron Energy Levels, Page 130</li> <li>• STEM: Investigate how TVs have changed since their invention through today. Hypothesize and defend in writing how you think TV's will be different in the future.</li> </ul>

<p>protons. Negatively charged electrons surround the nucleus and overall, the atom is electrically neutral.</p> <p><b>Substrand C:</b> Isotopes of a given element differ in the number of neutrons in the nucleus. Their chemical properties remain essentially the same.</p> <p><b>Substrand D:</b> The periodic table arranges the elements in order of atomic number (the number of protons). The elements are grouped according to similar chemical and physical properties. Properties vary in a regular pattern across the rows (periods) and down the columns (families or groups). As a result, an element's chemical and physical properties can be predicted knowing only its position on the periodic table.</p> <p><b>Substrand E:</b> An atom's electron structure determines its physical and chemical properties. Metals have valence electrons that can be modeled as a sea of electrons where the valence electrons move freely and are not associated with individual atoms. These freely moving electrons explain the metallic properties such as conductivity, malleability, and ductility.</p>		<ul style="list-style-type: none"> <li>• Valence Electrons</li> </ul>	<p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Making a Model, Page 110</li> <li>• Evidence for Atoms, Page 114</li> <li>• Modeling Isotopes, Page 122</li> <li>• Electron Levels, Page 131</li> <li>• Summative Assessment</li> </ul>
<p><b>Unit Four: The Periodic Table</b>  <b>Timeline: 5-7 Days</b></p>			
<p><b>Standard 2:</b> Materials and Their Properties</p> <p><b>Strand 1:</b> Properties and Structure of Materials</p> <p><b>Substrand D:</b> The periodic table arranges the elements in order of atomic number (the number of protons). The elements are grouped according to similar chemical</p>	<p>The structures of materials determine their properties.</p>	<p>How do the physical and chemical properties of an element determine their placement on the Periodic Table?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 9<sup>th</sup> Grade</b></p>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Periodic Calendar, Page 145</li> <li>• Interpreting the Periodic Table, Page 149</li> <li>• Ions, Page 153</li> <li>• Organizing Elements Skill Sheets, Page 145</li> <li>• Families of Elements, Page 156</li> </ul>

<p>and physical properties. Properties vary in a regular pattern across the rows (periods) and down the columns (families or groups). As a result, an element's chemical and physical properties can be predicted knowing only its position on the periodic table.</p> <p><b>Substrand F:</b> Ionic compounds form when atoms transfer electrons. Covalent compounds form when atoms share electrons. Both types of interactions generally involve valence electrons and produce chemical bonds that determine the chemical property of the compound.</p>		<ul style="list-style-type: none"> <li>• Periodic Table</li> <li>• Groups and Families</li> <li>• Properties of Metals</li> <li>• Ions</li> </ul>	<ul style="list-style-type: none"> <li>• Metal Coins, Page 156</li> <li>• STEM: Research the Noble Gases. Use your information to explain why neon is used instead of another element as a light source in neon lights.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• A Periodic Table, Page 143</li> <li>• The Cost of Metals, Page 160</li> <li>• Ions, Page 153</li> <li>• Summative Assessment</li> </ul>
<p><b>Unit Five: Structure of Matter</b>  <b>Timeline: 7-10 Days</b></p>			
<p><b>Standard 2:</b> Materials and Their Properties</p> <p><b>Strand 1:</b> Properties and Structure of Materials</p> <p><b>Substrand B:</b> Elements and compounds are pure substances. Elements cannot be decomposed into simpler materials by chemical reactions. Elements can react to form compounds. Elements and/or compounds may also be physically combined to form mixtures.</p> <p><b>Substrand F:</b> Ionic compounds form when atoms transfer electrons. Covalent compounds form when atoms share electrons. Both types of interactions generally involve valence electrons and produce chemical bonds that determine the chemical property of the compound.</p>	<p>The structures of materials determine their properties.</p>	<p>How can the Periodic Table be used to predict the type of chemical bond found in a compound?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 9<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>• Structure of Matter</li> <li>• Ionic Bonds</li> <li>• Covalent Bonds</li> <li>• Metallic Bonds</li> <li>• Conductivity</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Conductivity, Page 151</li> <li>• What are compounds? Page 177</li> <li>• Forming Compounds, Page 178</li> <li>• Modeling Network Structures, Page 180</li> <li>• Comparing Ionic and Covalent Bonds, Page 183</li> <li>• Modeling Molecules, Page 183</li> <li>• Ionic Bonds, Page 184</li> <li>• Covalent Bonds, Page 186</li> <li>• Metallic Bonds, Page 188</li> <li>• Balancing Charges, Page 191</li> <li>• Writing Ionic Formulas, Page 193</li> <li>• Naming Covalent Compounds, Page 194</li> <li>• STEM: Investigate why metals conduct electricity and nonmetals do not conduct electricity. Demonstrate</li> </ul>

			<p>why some metals conduct electricity better than others?</p> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Melting Sugar and Salt, Page 175</li> <li>• A Close Packed Structure, Page 188</li> <li>• Summative Assessment</li> </ul>
<p><b>Unit Six: Reactions</b> <b>Timeline: 5-7 Days</b></p>			
<p><b>Standard 2:</b> Materials and Their Properties</p> <p><b>Strand 4:</b> Chemical Reactions, <b>Substrand A:</b> Chemical reactions result in new substances with properties that are different from those of the component parts (reactants). <b>Substrand B:</b> There are different types of chemical reactions. Precipitation reactions produce insoluble substances (e.g., double replacement). The transfer of electrons between atoms is a reduction-oxidation (redox) reaction (e.g., single-replacement combustion, synthesis, decomposition). Some acid/base reactions involve the transfer of hydrogen ions.</p>	<p>There are several ways in which elements and/or compounds react to form new substances and each reaction involves energy.</p>	<p>Why does each chemical reaction involve energy?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 9<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>• Chemical Reactions</li> <li>• Chemical Equations</li> <li>• Chemical Reaction Types</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Electric Lemon, Page 219</li> <li>• Chemical Equations, Page 218</li> <li>• Equation Analogy, Page 225</li> <li>• Balancing Chemical Equations, Page 227</li> <li>• Reaction Types, Page 230</li> <li>• Electrolysis, Page 231</li> <li>• STEM: Research the three different types of fire extinguishers and fire type each is designed to extinguish. Investigate what reactions must take place for each type of extinguisher to work as intended.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Matter and Chemical Reactions, Page 217</li> <li>• Balancing Chemical Equations, Page 228</li> <li>• Determining the Products of a Reaction, Page 235</li> <li>• Summative Assessment</li> </ul>
<p><b>Unit Seven: Solutions</b> <b>Timeline: 5-7 Days</b></p>			
<p><b>Standard 2:</b> Materials and Their Properties</p>	<p>The properties of a mixture are based on the properties of its</p>	<p>How can properties of a solution be used to predict its polarity,</p>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Types of Mixtures, Page 259</li> </ul>

<p><b>Strand 2:</b> Mixtures and Solutions  <b>Substrand A:</b> Properties of solutions, such as pH, solubility, and electrical conductivity depend upon the concentration and interactions of the solute and solvents.</p>	<p>components.</p>	<p>solubility, pH, conductivity and the ability to diffuse molecules?</p> <p><b><u>Learning Targets:</u></b></p> <p><b><u>GLEs: 9<sup>th</sup> Grade</u></b></p> <ul style="list-style-type: none"> <li>• Solutions</li> <li>• Water properties such as polarity, solubility, diffusion, pH, and conductivity</li> </ul>	<ul style="list-style-type: none"> <li>• Solution or Not? Page 261</li> <li>• Conservation of Mass but not Volume, Page 263</li> <li>• Effects of Charge on Water, Page 267</li> <li>• Effect of Stirring on Dissolving, Page 271</li> <li>• STEM: Investigate the chemistry behind turning crude oil into gasoline. Investigate what other products can be obtained from crude oil and explain what temperature has to do with creating each product.</li> </ul> <p><b><u>Formal:</u></b></p> <ul style="list-style-type: none"> <li>• Dissolving Sugar and Salt, Page 257</li> <li>• Making Butter, Page 262</li> <li>• What Will Dissolve a Nonpolar Substance? Page 270</li> <li>• Summative Assessment</li> </ul>
<p><b>Unit Eight: Chemical Energy Nuclear Energy</b>  <b>Timeline: 2-3 Days</b></p>			
<p><b>Standard 3:</b> Energy and Its Effects</p> <p><b>Strand 1:</b> The Forms and Sources of Energy  <b>Substrand F:</b> Chemical energy is derived from the making and breaking of chemical bonds.  <b>Substrand G:</b> Nuclear energy is a form of potential energy that is released when a portion of the mass of the nucleus is converted to energy through nuclear fusion, nuclear fission, or radioactive decay</p> <p><b>Strand 2:</b> Forces and Transfer of Energy  <b>Substrand I:</b> The nuclear forces that hold the nucleus of an atom together are much</p>	<p>Energy takes many forms. These forms can be grouped into types of energy that are associated with the motion of mass (kinetic energy), and types of energy associated with the position of mass and with energy fields (potential energy).</p> <p>Energy readily transforms from one form to another, but these transformations are not always reversible. The details of these transformations depend upon the initial form of the energy and the properties of the materials involved. Energy may transfer</p>	<p>Compare and contrast chemical energy and nuclear energy.</p> <p><b><u>Learning Targets:</u></b></p> <p><b><u>GLEs: 9<sup>th</sup> Grade</u></b></p> <ul style="list-style-type: none"> <li>• Electron Energy</li> <li>• Radioactive Decay</li> </ul>	<p><b><u>Informal:</u></b></p> <ul style="list-style-type: none"> <li>• Chemical Energy, Page 220</li> <li>• Detecting Radon, Page 327</li> <li>• Nuclear Decay, Page 331</li> <li>• Acting Out Half-life, Page 333</li> <li>• STEM: Determine the half-life of different radioactive isotopes. Investigate how the half-life of each of these elements led scientists to find out information about the earth or their effects on humanity.</li> </ul> <p><b><u>Formal:</u></b></p> <ul style="list-style-type: none"> <li>• Where does chemical energy come from? Reading Check, Page 221</li> <li>• Radiation and Film, Page 325</li> <li>• Modeling Decay and Half-life,</li> </ul>

<p>stronger than the repulsive electric forces acting between the protons that would make the nucleus fly apart, therefore, most atoms have stable nuclei.</p>	<p>into or out of a system and it may change forms, but the total energy cannot change.</p>		<p>Page335</p> <ul style="list-style-type: none"> <li>• Simulating Nuclear Decay Reactions, Page 352</li> <li>• Summative Assessment</li> </ul>
<p><b>Unit Nine: Work and Energy</b> <b>Timeline: 7-10 Days</b></p>			
<p><b>Standard 3:</b> Energy and It’s Effects <b>Strand 1:</b> The Forms and Sources of Energy <b>Substrand B:</b> An object has kinetic energy because of its linear motion, rotational motion, or both. The kinetic energy of an object can be determined knowing its mass and speed. The object’s geometry also needs to be known to determine its rotational kinetic energy. An object can have potential energy when under the influence of gravity, elastic forces or electric forces and its potential energy can be determined from its position. <b>Substrand D:</b> Thermal (heat) energy is associated with the random kinetic energy of the molecules of a substance.</p> <p><b>Strand 2:</b> Forces and Transfer of Energy <b>Substrand B:</b> Forces are mechanisms that can transfer energy from one object to another. A force acting on an object and moving it through a distance does work on that object and changes its kinetic energy, potential energy, or both. Power indicates the rate at which forces transfer energy to an object or away from it.</p> <p><b>Strand 3:</b> Energy Interacting With Materials <b>Substrand A:</b> Energy cannot be created</p>	<p>Energy readily transforms from one form to another, but these transformations are not always reversible. The details of these transformations depend upon the initial form of the energy and the properties of the materials involved. Energy may transfer into or out of a system and it may change forms, but the total energy cannot change.</p> <p>Changes take place because of the transfer of energy. Energy is transferred to matter through the action of forces. Different forces are responsible for the transfer of the different forms of energy.</p> <p>Energy readily transforms from one form to another, but these transformations are not always reversible. The details of these transformations depend upon the initial form of the energy and the properties of the materials involved. Energy may transfer into or out of a system and it may change forms, but the total energy cannot change.</p>	<p>What are the different types of energy and how does each support the Law of Conservation of Energy?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 9<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>• Work</li> <li>• Power</li> <li>• Kinetic Energy</li> <li>• Potential Energy</li> <li>• Gravitational Potential Energy</li> <li>• Elastic Potential Energy</li> <li>• Heat Energy</li> <li>• Energy Transfer</li> <li>• Energy Transformation</li> <li>• Law of Conservation of Energy</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Work and Machines, Page 431</li> <li>• Work, Page 432</li> <li>• Power, Page 434</li> <li>• What is Energy, Page 434</li> <li>• Potential Energy, Page 436</li> <li>• Kinetic Energy, Page 438</li> <li>• Potential and Kinetic Changes, Page 447</li> <li>• Mechanical and Chemical Energy, Page 449</li> <li>• Elastic Potential Energy, Page 508</li> <li>• Storing Energy, Page 453</li> <li>• Bouncing Balls, Page 455</li> <li>• Open or Closed? Page 457</li> <li>• Boiling Water, Page 473</li> <li>• Energy Transfer and Boiling Water, Page 480</li> <li>• STEM: Investigate how electrical energy is generated from running water and create an energy chain to show what happens to energy as water moves through a hydroelectric power plant.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Kitchen Tools, Page429</li> <li>• Power Output, Page 433</li> <li>• Energy Transfer, Page 454</li> <li>• Is Energy Conserved by a Pendulum? Page 457</li> <li>• Sensing Hot and Cold, Page 475</li> </ul>

<p>nor destroyed. Energy can be transferred from one object to another and can be transformed from one form to another, but the total amount of energy never changes. Recognizing that energy is conserved, the processes of energy transformation and energy transfer can be used to understand the changes that take place in physical systems.</p>			<ul style="list-style-type: none"> <li>• Temperature and Energy, Page 478</li> <li>• Summative Assessment</li> </ul>
<p><b>Unit Ten: Mechanical Waves</b> <b>Timeline: 5-7 Days</b></p>			
<p><b>Standard 3:</b> Energy and Its Effects</p> <p><b>Strand 1:</b> The Forms and Sources of Energy</p> <p><b>Substrand C:</b> Mechanical waves result from the organized vibrations of molecules in substances. Kinetic energy can be transferred very quickly over large distances by mechanical waves.</p>	<p>Energy readily transforms from one form to another, but these transformations are not always reversible. The details of these transformations depend upon the initial form of the energy and the properties of the materials involved. Energy may transfer into or out of a system and it may change forms, but the total energy cannot change.</p>	<p>How do mechanical waves transport energy and why do mechanical waves pass through some states of matter better than others?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 9<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>• Mechanical Waves</li> <li>• Mechanical Wave Energy</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Do the Wave, Page 505</li> <li>• Watching Waves, Page 506</li> <li>• Waves and Energy Transfer, Page 507</li> <li>• Transverse and Longitudinal Waves, Page 511</li> <li>• Exploring Wave Properties, Page 515</li> <li>• Representing Waves, Page 515</li> <li>• Reflection, Diffraction and Refraction, Page 524</li> <li>• Showing Reflection, Page 524</li> <li>• Observing Reflection and Refraction, Page 526</li> <li>• STEM: Investigate how transverse waves can cause a bridge to collapse.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Making Waves, Page 503</li> <li>• Particle Motion in a Wave, Page 509</li> <li>• Harmonic Motion, Page 508</li> <li>• Transverse and Longitudinal Waves, Page 512</li> <li>• Transverse Waves, Page 530</li> <li>• Summative Assessment</li> </ul>

<b>Unit Eleven: Electromagnetic Waves (Sample Unit Included)</b> <b>Timeline: 3-5 Days</b>			
<b>Standard 3:</b> Energy and Its Effects  <b>Strand 1:</b> The Forms and Sources of Energy <b>Substrand A:</b> Electromagnetic waves carry a single form of energy called electromagnetic (radiant) energy.	Energy readily transforms from one form to another, but these transformations are not always reversible. The details of these transformations depend upon the initial form of the energy and the properties of the materials involved. Energy may transfer into or out of a system and it may change forms, but the total energy cannot change.	How does selective absorption affect an electromagnetic wave as it travels through different sections of the Electromagnetic Spectrum?  <b>Learning Targets:</b>  <b>GLEs: 9<sup>th</sup> Grade</b> <ul style="list-style-type: none"> <li>• Electromagnetic Waves</li> <li>• Electromagnetic Spectrum</li> <li>• Selective Absorption</li> </ul>	<b>Informal:</b> <ul style="list-style-type: none"> <li>• Wave Speed (frequency), Page 518, 519</li> <li>• Electromagnetic Spectrum, Page 521</li> <li>• STEM: Rough diamonds found in nature do not sparkle. Investigate the technology and engineering principles that allow cut diamonds to sparkle.</li> </ul> <b>Formal:</b> <ul style="list-style-type: none"> <li>• Wave Speed, Page 520</li> <li>• Absorption of Radiant Heat, Page 482</li> <li>• Polarization, Page 511</li> <li>• Summative Assessment</li> </ul>
<b>Unit Twelve: Gravity</b> <b>Timeline: 2-3 Days</b>			
<b>Standard 3:</b> Energy and Its Effects  <b>Strand 2:</b> Forces and The Transfer of Energy <b>Substrand E:</b> Gravity is a universal force of attraction that each mass exerts on any other mass. The strength of the force depends on the masses of the objects and the distance between them. The force of gravity is generally not important unless at least one of the two masses involved is huge (a star, the Earth or another planet or a moon).	Energy readily transforms from one form to another, but these transformations are not always reversible. The details of these transformations depend upon the initial form of the energy and the properties of the materials involved. Energy may transfer into or out of a system and it may change forms, but the total energy cannot change.	How does mass affect gravitational forces as two objects move towards and then away from each other?  <b>Learning Targets:</b>  <b>GLEs: 9<sup>th</sup> Grade</b> <ul style="list-style-type: none"> <li>• Kinetic Energy and Mass</li> <li>• Potential Energy and Weight</li> <li>• Gravity</li> </ul>	<b>Informal:</b> <ul style="list-style-type: none"> <li>• Forces, Page 380</li> <li>• Gravity, Page 403</li> <li>• Mass and Weight, Page 403</li> <li>• Energy and Mass, Page 406</li> <li>• Energy and Weight, Page 404</li> <li>• STEM: Astronauts in space appear to be unaffected by the force of gravity. Investigate if this phenomenon is true or false and provide an explanation.</li> </ul> <b>Formal:</b> <ul style="list-style-type: none"> <li>• Summative Assessment: Section Review, Page 410</li> <li>• (No other assessments provided by curricular tool)</li> </ul>
<b>Unit Thirteen: Energy Chains</b> <b>Timeline: 3-5 Days</b>			
<b>Standard 3:</b> Energy and Its Effects	Energy readily transforms from one form to another, but these	Why are energy chains useful when explaining energy	<b>Informal:</b> (From 9 <sup>th</sup> Grade GLEs) <ul style="list-style-type: none"> <li>• Make an energy chain to trace the</li> </ul>

<p><b>Strand 3: Energy Interacting With Materials</b>  <b>Substrand B:</b> Most of the changes that occur in the universe involve the transformation of energy from one form to another. Almost all of these energy transformations lead to the production of some heat energy, whether or not heat energy is the desired output of the transformation process.</p>	<p>transformations are not always reversible. The details of these transformations depend upon the initial form of the energy and the properties of the materials involved. Energy may transfer into or out of a system and it may change forms, but the total energy cannot change.</p>	<p>transformations?  <u><b>Learning Targets:</b></u>  <u><b>GLEs: 9<sup>th</sup> Grade</b></u> <ul style="list-style-type: none"> <li>• Energy Chains</li> </ul> </p>	<p>flow of energy through systems involving sliding friction and air resistance.</p> <ul style="list-style-type: none"> <li>• Make an energy chain to trace the flow of energy as mechanical energy is transformed into heat energy.</li> <li>• Make an energy chain to illustrate an example of the selective absorption of a mechanical wave.</li> <li>• Make an energy chain to illustrate an example of the selective absorption of an electromagnetic wave.</li> <li>• STEM: No STEM Activity</li> </ul> <p><u><b>Formal:</b></u> (No Formal Assessment)</p>
<p><b>Unit Fourteen: The Rock Cycle</b>  <b>Timeline: 2-3 Days</b></p>			
<p><b>Standard 2: Materials and Their Properties</b></p> <p><b>Strand 3: Mixtures and Solutions</b>  <b>Substrand A:</b> The total mass of the system remains the same regardless of how atoms and molecules in a closed system interact with one another, or how they combine or break apart.</p> <p><b>Standard 3: Energy and Its Effects</b></p> <p><b>Strand 1: The Forms and Sources of Energy</b>  <b>Substrand B:</b> An object has kinetic energy because of its linear motion, rotational motion, or both. The kinetic energy of an object can be determined knowing its mass and speed. The object's geometry also needs to be known to determine its rotational kinetic energy.</p>	<p>When materials interact within a closed system, the total mass of the system remains the same.</p> <p>Energy takes many forms. These forms can be grouped into types of energy that are associated with the motion of mass (kinetic energy), and types of energy associated with the position of mass and with energy fields (potential energy).</p> <p>Changes take place because of the transfer of energy. Energy is transferred to matter through the action of forces. Different forces are responsible for the transfer of the different forms of energy.</p>	<p>How does the Rock Cycle explain the Law of Conservation of Matter?</p> <p><u><b>Learning Targets:</b></u>  <u><b>GLEs: 9<sup>th</sup> Grade</b></u> <ul style="list-style-type: none"> <li>• Law of Conservation of Matter</li> <li>• The Rock Cycle</li> </ul> </p>	<p><u><b>Informal:</b></u></p> <ul style="list-style-type: none"> <li>• The Rock Cycle, Page 752</li> <li>• STEM: No STEM Activity</li> </ul> <p><u><b>Formal:</b></u></p> <ul style="list-style-type: none"> <li>• Describe energy sources, processes and transformations of Earth materials as they progress through the rock cycle to form new rocks, Standard 5 GLEs.</li> <li>• Summative Assessment</li> </ul>

<p>An object can have potential energy when under the influence of gravity, elastic forces or electric forces and its potential energy can be determined from its position.</p> <p><b>Substrand D:</b> Thermal (heat) energy is associated with the random kinetic energy of the molecules of a substance.</p> <p><b>Strand 2:</b> Forces and the Transfer of Energy</p> <p><b>Substrand B:</b> Forces are mechanisms that can transfer energy from one object to another. A force acting on an object and moving it through a distance does work on that object and changes its kinetic energy, potential energy, or both. Power indicates the rate at which forces transfer energy to an object or away from it.</p> <p><b>Standard 5:</b> Earth’s Dynamic Systems</p> <p><b>Strand 1:</b> Components of Earth</p> <p><b>Substrand B:</b> Rocks can be classified as igneous, metamorphic and sedimentary based on the method of formation. The natural cycling of rocks includes the formation of new sediment through erosion and weathering and of new rock through heat and compaction of the sediment.</p>			
<p><b>Unit Fifteen: Minerals And Rocks</b>  <b>Timeline: 10-14 Days</b></p>			
<p><b>Standard 2:</b> Materials and Their Properties</p> <p><b>Strand 1:</b> A Properties and structures of Materials</p> <p><b>Substrand B:</b> Elements and compounds are pure substances. Elements cannot be</p>	<p>The structures of materials determine their properties. People develop new materials as a response to the needs of society and the pursuit of knowledge. This development</p>	<p>How are the physical and chemical properties of minerals different from those of rocks?</p> <p><b><u>Learning Targets:</u></b></p>	<p><b><u>Informal:</u></b></p> <ul style="list-style-type: none"> <li>• Minerals, Page 748</li> <li>• Igneous, Sedimentary, and Metamorphic Rocks, Page 749</li> <li>• STEM: Research Ores. Investigate the technology that enables industry</li> </ul>

<p>decomposed into simpler materials by chemical reactions. Elements can react to form compounds. Elements and/or compounds may also be physically combined to form mixtures.</p> <p><b>Standard 5:</b> Earth's Dynamic Systems</p> <p><b>Strand 1:</b> Components of Earth, <b>Substrand A:</b> Minerals are the building blocks of rocks. Common rock-forming minerals found in Delaware (calcite, quartz, mica, feldspar, and hornblende) can be identified by their chemical and physical properties. <b>Substrand B:</b> Rocks can be classified as igneous, metamorphic and sedimentary based on the method of formation. The natural cycling of rocks includes the formation of new sediment through erosion and weathering and of new rock through heat and compaction of the sediment.</p>	<p>may have risks and benefits to humans and the environment.</p>	<p><b>GLEs: 9<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>• Minerals</li> <li>• Rocks</li> </ul>	<p>to obtain valuable materials from a particular ore.</p> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Rock Formation, Page 753</li> <li>• Summative Assessment</li> </ul>
<p><b>Unit Sixteen: Weathering, Erosion, and Deposition</b> <b>Timeline: 5-7 Days</b></p>			
<p><b>Standard 3:</b> Energy and Its Effects</p> <p><b>Strand 1:</b> The Forms and Sources of Energy <b>Substrand B:</b> An object has kinetic energy because of its linear motion, rotational motion, or both. The kinetic energy of an object can be determined knowing its mass and speed. The object's geometry also needs to be known to determine its rotational kinetic energy. An object can have potential energy when under the influence of gravity, elastic forces or electric forces and its potential</p>	<p>Energy takes many forms. These forms can be grouped into types of energy that are associated with the motion of mass (kinetic energy), and types of energy associated with the position of mass and with energy fields (potential energy).</p> <p>Earth's systems can be broken down into individual components which have observable measurable properties.</p>	<p>How does energy explain the changes and movement of Earth materials?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 9<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>• Energy Sources, processes and transformations of Earth materials</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Weathering, Page 756</li> <li>• Physical and Chemical Weathering, Page 756</li> <li>• Erosion, Page 759</li> <li>• STEM: Research how some minerals and rocks can be chemically weathered. Apply this information to the protection of manmade objects from being chemically weathered.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Describe the energy that can be</li> </ul>

<p>energy can be determined from its position.</p> <p><b>Standard 5:</b> Earth’s Dynamic Systems  <b>Strand 1:</b> Components of Earth  <b>Substrand B:</b> Rocks can be classified as igneous, metamorphic and sedimentary based on the method of formation. The natural cycling of rocks includes the formation of new sediment through erosion and weathering and of new rock through heat and compaction of the sediment.</p>			<p>applied to minerals and rocks to change their physical and chemical properties.</p> <ul style="list-style-type: none"> <li>Summative Assessment</li> </ul>
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**Unit Seventeen: Earth’s Interior: Earthquakes, Volcanoes, and Plate Tectonics**  
**Timeline: 10-15 Days**

<p><b>Standard 2:</b> Materials and Their Properties</p> <p><b>Strand 3:</b> Conservation of Matter  <b>Substrand B:</b> Radioactive isotopes are unstable and undergo spontaneous and predictable nuclear reactions emitting particles and/or radiation, and become new isotopes that can have very different properties. In these nuclear changes, the total of the mass and energy remains the same.</p> <p><b>Standard 3:</b> Energy and Its Effects</p> <p><b>Strand 1:</b> The Forms and Sources of Energy  <b>Substrand B:</b> An object has kinetic energy because of its linear motion, rotational motion, or both. The kinetic energy of an object can be determined knowing its mass and speed. The object’s geometry also needs to be known to determine its rotational kinetic energy.</p>	<p>When materials interact within a closed system, the total mass of the system remains the same.</p> <p>Energy takes many forms. These forms can be grouped into types of energy that are associated with the motion of mass (kinetic energy), and types of energy associated with the position of mass and with energy fields (potential energy).</p> <p>Energy readily transforms from one form to another, but these transformations are not always reversible. The details of these transformations depend upon the initial form of the energy and the properties of the materials involved. Energy may transfer into or out of a system and it may change forms, but the total energy cannot change.</p>	<p>How have earthquakes, volcanoes, and plate tectonics affected the Earth locally and globally over time?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 9<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>Earth Layers</li> <li>Earthquakes</li> <li>Volcanoes</li> <li>Plate Tectonics</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>Earth’s Interior,, Page 729</li> <li>Related Dinosaurs, Page 729</li> <li>Continental Drift and Plate Tectonics, Page 731</li> <li>Earthquakes and Seismic Waves, Page 506</li> <li>Earthquakes, Page 738</li> <li>Locating Earthquakes, Page 741</li> <li>Richter Scale and Energy, Page 472</li> <li>Earthquake Damage, Page 742</li> <li>Eruption Simulation, Page 743</li> <li>Types of Volcanoes, Page 744</li> <li>STEM: Investigate how GPS technology has led to greater understanding of Plate Tectonics.</li> <li>STEM: Investigate why technology is unable at this time to predict with accuracy the time and place an earthquake will occur.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>Convection and Plate Tectonics Page</li> </ul>
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<p>An object can have potential energy when under the influence of gravity, elastic forces or electric forces and its potential energy can be determined from its position.</p> <p><b>Substrand D:</b> Thermal (heat) energy is associated with the random kinetic energy of the molecules of a substance.</p> <p><b>Strand 3:</b> Energy Interacting With Materials: The Transformation and Conservation of Energy</p> <p><b>Substrand A:</b> Energy cannot be created nor destroyed. Energy can be transferred from one object to another and can be transformed from one form to another, but the total amount of energy never changes. Recognizing that energy is conserved, the processes of energy transformation and energy transfer can be used to understand the changes that take place in physical systems.</p> <p><b>Standard 5:</b> Earth's Dynamic Systems</p> <p><b>Strand 1:</b> Components of Earth,</p> <p><b>Substrand C:</b> Earth's geosphere is composed of layers of rocks which have separated due to density and temperature differences and classified chemically into a crust (which includes continental and oceanic rock), a hot, convecting mantle, and a dense metallic core.</p> <p><b>Substrand D:</b> Continental and oceanic rock differ in overall composition, density and age.</p> <p><b>Strand 2:</b> Interactions Throughout Earth's systems <b>Substrand A:</b> Earth's four spheres interact as part of a dynamic system in which changes over time are the result of external and internal energy</p>	<p>Earth's systems can be broken down into individual components which have observable measurable properties.</p> <p>Earth's components form systems. These systems continually interact at different rates of time, affecting the Earth locally and globally.</p>		<p>733</p> <ul style="list-style-type: none"> <li>• Continental Drift, Page 732</li> <li>• Plate Tectonic Boundaries, Page 736</li> <li>• Seismic Waves, Page 739</li> <li>• Illustrating a Volcano, Page 744</li> <li>• Finding the Epicenter of an Earthquake, Page 762</li> <li>• Summative Assessment</li> </ul>
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<p>sources.</p> <p><b>Substrand B:</b> Tectonic plates press against one another in some places (convergence), pull apart in other places (divergence), or slide past each other. These plate movements may result in the formation of mountain ranges, and can lead to earthquakes, volcanic eruptions, and tsunamis. The consequences of these events impact the surrounding atmosphere, geosphere, hydrosphere, and the life existing within them.</p> <p><b>Substrand C:</b> Earthquakes result when rocks rupture and slide by one another releasing stored energy which travels through the geosphere in the form of waves. Local earthquake risks can be assessed and preparations made to minimize the hazards.</p> <p><b>Substrand D:</b> The type and eruptive style of volcanoes is determined by the viscosity and gas pressure of the magma. The effects of these eruptions can have both local and global consequences.</p>			
<p><b>Unit Eighteen : Solar Nebula Theory</b>  <b>Timeline: 3-5 Days</b></p>			
<p><b>Standard 4:</b> Earth in Space</p> <p><b>Strand 2:</b> The Solar System, <b>Substrand A:</b> The motion and the basic elements (periodic table) that comprise our Solar System are consistent with the theory that the Solar System emerged from a large disk of gas and dust.</p>	<p>Most objects in the Solar System orbit the Sun and have distinctive physical characteristics and orderly motion (grades 6-8) which are a result of their formation and changes over time</p>	<p>How does the Solar Nebula Theory explain the Solar System’s evolution over time?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 9<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>Solar Nebular Theory</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>Formation of the Solar System, Page 671</li> <li>The Nebular Hypothesis, Page 673</li> <li>Rocks in Space, Page 675</li> <li>How the Moon Formed, Page 678</li> <li>STEM: Investigate how the evolution of scientific thought, using advancements in technology, led to the current Solar Nebular Theory.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>Estimating 4.6 Billion, Page 672</li> </ul>

			<ul style="list-style-type: none"><li>• The Size and Power Output of the Sun, Page 680</li><li>• Summative Assessment</li></ul>
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# Curriculum Framework for Biology

School: Newark Charter School

Curricular Tool: Biology-Holt McDougal

Grade: 10

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit One: Chemistry of Life</b> <b>Timeline : 2-5 Days</b>			
<p><b>Standard 2:</b> Materials and Their Properties</p> <p><b>Strand 1:</b> Properties and Structure of Materials.  <b>Substrand G:</b> A change in the physical properties does not change the chemical composition of the substance. The physical properties of element and compounds (such as melting and boiling points) reflect the nature of the interactions among their atoms, ions, or molecules and the electrical forces that exist between them.</p> <p><b>Strand 4:</b> Chemical Reactions  <b>Substrand A:</b> Chemical reactions result in the new substances with properties that are different from those of the component parts (reactants).  <b>Substrand B:</b> There are different types of chemical reactions.</p> <p><b>Standard 6:</b> Life Processes  <b>Strand 2:</b> Matter and Energy Transformations  <b>Substrand A:</b> Cells carry out a variety of chemical transformations (i.e., cellular respiration, photosynthesis, and digestion) which allow conversion of energy from one form to another, the breakdown of molecules into smaller units, and the building of larger molecules from smaller ones. Most of these</p>	<p>The structures of materials determine their properties.</p> <p>There are several ways in which elements and/or compounds react to form new substances and each reaction involves energy.</p> <p>All organisms transfer matter and convert energy from one form to another. Both matter and energy are necessary to build and maintain structures within the organism</p>	<p>How do enzymes help speed up the transformation of carbon as it moves through the Carbon Cycle?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 10<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>• Atoms, Ions, and Molecules</li> <li>• Properties of Water</li> <li>• Carbon Cycle</li> <li>• Chemical Reactions</li> <li>• Enzymes</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Dehydration of Sucrose, Page 35</li> <li>• Energy and Chemical Reactions, Page 52</li> <li>• Critical Thinking, Page 53</li> <li>• Catalysts and Activation Energy, Page 54</li> <li>• Critical Thinking, Page 56</li> <li>• Critical Thinking, Page 62</li> <li>• STEM: Research how increased CO<sub>2</sub> in the atmosphere can lead to climate change. Investigate ways technology can monitor CO<sub>2</sub> emissions.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Chemical Bonding, Page 51</li> <li>• Enzymatic Activity, Page 57</li> <li>• Testing pH, Page 58</li> <li>• Enzymes, Pate 59</li> <li>• Summative Assessment</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
transformations are made possible by protein catalysts called enzymes.			
<b>Unit Two: Cell Structure and Function</b> <b>Timeline: 10-12 Days</b>			
<p><b>Standard 6: Life Processes</b></p> <p><b>Strand 1: Structure/Function Relationship</b>  <b>Substrand A:</b> In order to establish and maintain their complex organization and structure, organisms must obtain, transform, and transport matter and energy, eliminate waste products, and coordinate their internal activities.</p> <p><b>Substrand B.</b> Cells take highly varied forms in different plants, animals, and microorganisms. Structural variations among cells determine the function each cell performs.</p> <p><b>Substrand C:</b> Cells have distinct and separate structures (organelles), which perform and monitor processes essential for survival of the cell (e.g., energy use, waste disposal, synthesis of new molecules, and storage of genetic material). The highly specific function of each organelle is directly related to its structure.</p> <p><b>Substrand D.</b> The cell membrane is dynamic and interacts with internal membranous structures as materials are transported into and out of the cell.</p>	<p>Living systems, from the organismic to the cellular level, demonstrate the complementary nature of structure and function.</p>	<p>How does the structure and function of cells explain the possible evolution of Eukaryotic cells from the endosymbiosis of prokaryotic organisms?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 10<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>• Cell Structure</li> <li>• Cell Membranes</li> <li>• Diffusion and Osmosis</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Polar and Nonpolar Molecules, Page 68</li> <li>• Critical Thinking, Page 72</li> <li>• Cell Structure, Page 74</li> <li>• Critical Thinking, Page 79</li> <li>• Cell Membrane, Page 82</li> <li>• Critical Thinking, Page 84</li> <li>• Endocytosis and Exocytosis, Page 90</li> <li>• Critical Thinking, Page 91</li> <li>• Hands-On Activity, Page 85</li> <li>• STEM: Investigate how technology has expanded our ability to observe and understand cellular processes.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Modeling the Cell Membrane, Page 83</li> <li>• Diffusion Across a Membrane 88</li> <li>• Comparing Cells, Page 92</li> <li>• Modeling the Cell, Page 93</li> <li>• Summative Assessment</li> </ul>
<b>Unit Three: Cells and Energy</b> <b>Timeline: 7-9 Days</b>			
<p><b>Standard 6: Life Processes</b></p> <p><b>Strand 2: Matter and Energy Transformations</b>  <b>Substrand A:</b> Cells carry out a variety of chemical transformations (i.e., cellular</p>	<p>All organisms transfer matter and convert energy from one form to another. Both matter and energy are necessary to build and maintain structures</p>	<p>Why do plants that can photosynthesize still need to perform cellular respiration?</p> <p><b>Learning Targets:</b></p>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Cellular Respiration, Page 98</li> <li>• ATP and ADP, Page 101</li> <li>• Critical Thinking, Page 102</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>respiration, photosynthesis, and digestion) which allow conversion of energy from one form to another, the breakdown of molecules into smaller units, and the building of larger molecules from smaller ones. Most of these transformations are made possible by protein catalysts called enzymes.</p> <p><b>Substrand B:</b> Plant cells contain chloroplasts, which convert light energy into chemical energy through the process of photosynthesis. This chemical energy is used by the plants to convert carbon dioxide and water into glucose molecules, that may be used for energy or to form plant structures. Photosynthesis adds oxygen to the atmosphere and removes carbon dioxide.</p> <p><b>Substrand C:</b> All organisms, including plants, use the process of cellular respiration to transform stored energy in food molecules into usable energy. The energy produced is stored in the form of ATP and is used by organisms to conduct their life processes. Cellular respiration may require oxygen and adds carbon dioxide to the atmosphere.</p> <p><b>Substrand D:</b> Photosynthesis and cellular respiration are complementary processes resulting in the flow of energy and the cycling of matter in ecosystems.</p>	<p>within the organism.</p>	<p><b>GLEs: 10<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>• Matter Transformation</li> <li>• Energy Transformation</li> </ul>	<ul style="list-style-type: none"> <li>• Photosynthesis, Page 104</li> <li>• Critical Thinking, Page 105</li> <li>• Cellular Respiration, Page 114</li> <li>• Critical Thinking, Page 115</li> <li>• Hands-On Activity, Page 110</li> <li>• STEM: : New companies say pulling carbon dioxide straight from the air could solve global warming and provide an infinite source of gasoline. Investigate whether this statement has any truth associated with it.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Rates of Photosynthesis, Page 106</li> <li>• Cellular Respiration, Page 126</li> <li>• Summative Assessment</li> </ul>
<p><b>Unit Four: Cell Growth and Division</b>  <b>Timeline: 4-6 Days</b></p>			
<p><b>Standard 7:</b> Diversity and Continuity of Living Things</p> <p><b>Strand 1:</b> Reproduction, Heredity, and Development</p> <p><b>Substrand D:</b> Only random mutations in gametes can create the variation that inherited</p>	<p>Organisms reproduce, develop, have predictable life cycles, and pass on heritable traits to their offspring.</p>	<p>If initially an organism starts out as a ball of cells that are all alike, how do these cells become specialized in specific regions of the organism and explain the possible consequences if a cell cycle is</p>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Cell Division, Page 132</li> <li>• Cell Cycle, Page 134, Page 141</li> <li>• Critical Thinking, Page 137</li> <li>• Chromosome Structure, Page 139</li> <li>• Critical Thinking, Page 142</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>by an organism’s offspring. Somatic mutations are not inherited, but may lead to cell death, uncontrolled cell growth, or cancer.</p> <p><b>Substrand E:</b> During the cell cycle, DNA of the parent cell replicates and the cell divides into two cells that are identical to the parent. This process is used for growth and repair of body tissues and for asexual reproduction.</p> <p><b>Substrand F:</b> Meiosis is the production of sex cells (gametes). The production and release of these gametes is controlled by hormones. In meiosis, the number of chromosomes is reduced by one-half and chromosomes may randomly exchange homologous parts to create new chromosomes with combinations not necessarily found in the parent cell. This may increase variation within the species.</p>		<p>not regulated properly?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 10<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>• Cell Cycle</li> <li>• Meiosis</li> <li>• Cell Division</li> <li>• Asexual Reproduction</li> <li>• Multicellular Life</li> </ul>	<ul style="list-style-type: none"> <li>• Cell Cycle Regulation, Page 144</li> <li>• Critical Thinking, Page 147</li> <li>• Asexual Reproduction, Page 148</li> <li>• Critical Thinking, Page 150</li> <li>• Multicellular Life and Stem Cells, Page 153</li> <li>• Critical Thinking, Page 155</li> <li>• Hands-On Activity, Page 149</li> <li>• STEM: Research Stem cells. Investigate why Stem cells are important tools for addressing human health issues.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Cancer, Page 147</li> <li>• Mitosis in Onion Root Cells, Page 143</li> <li>• Modeling Cell Surface-Area-to-Volume Ratio, Page 156</li> <li>• Apoptosis, Page 157</li> <li>• Summative Assessment</li> </ul>
<p><b>Unit Five: Meiosis and Mendel</b>  <b>Timeline: 8-10 Days</b></p>			
<p><b>Standard 7:</b> Diversity and Continuity of Living Things</p> <p><b>Strand 1:</b> Reproduction, Heredity, and Development</p> <p><b>Substrand D:</b> Only random mutations in gametes can create the variation that inherited by an organism’s offspring. Somatic mutations are not inherited, but may lead to cell death, uncontrolled cell growth, or cancer.</p> <p><b>Substrand E:</b> During the cell cycle, DNA of the parent cell replicates and the cell divides into two cells that are identical to the parent.</p>	<p>Organisms reproduce, develop, have predictable life cycles, and pass on heritable traits to their offspring.</p>	<p>Why do offspring resemble their parents and why are some sexes more likely than others to inherit specific traits?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 10<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>• Sex-linked Traits</li> <li>• Chromosomes</li> <li>• Allele Combinations</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Alleles, Page 166</li> <li>• Chromosomes and Meiosis, Page 168</li> <li>• Critical Thinking, Page 171</li> <li>• Model of Meiosis I and II, page 174</li> <li>• Critical Thinking, Page 176</li> <li>• Mendel and Heredity, Page 177</li> <li>• Critical Thinking, Page 179</li> <li>• Traits, Genes, and Alleles, Page 180</li> <li>• Critical Thinking, Page 182</li> <li>• Traits and Probability, Page 183</li> <li>• Critical Thinking, Page 187</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>This process is used for growth and repair of body tissues and for asexual reproduction.</p> <p><b>Substrand F:</b> Meiosis is the production of sex cells (gametes). The production and release of these gametes is controlled by hormones. In meiosis, the number of chromosomes is reduced by one-half and chromosomes may randomly exchange homologous parts to create new chromosomes with combinations not necessarily found in the parent cell. This may increase variation within the species.</p>		<ul style="list-style-type: none"> <li>Genetic Variation</li> </ul>	<ul style="list-style-type: none"> <li>Genetic Variation, Page 189</li> <li>Critical Thinking, Page 191</li> <li>Hands-On Activity, Page 175</li> <li>STEM: Investigate the technology that goes into one or more of the following subjects: Genetic Testing, In Vitro Fertilization, Organismal Cloning, Curing Hemophilia</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>Using a Testcross to Determine Genotype, Page 185</li> <li>Allele Combinations and Punnett Squares, Page 188</li> <li>Modeling Meiosis, Page 192</li> <li>Probability Practice, Page 193</li> <li>Summative Assessment</li> </ul>
<p><b>Unit Six: Extending Mendelian Genetics</b>  <b>Timeline: 6-8 Days</b></p>			
<p><b>Standard 7:</b> Diversity and Continuity of Living Things</p> <p><b>Strand 1:</b> Reproduction, Heredity, and Development</p> <p><b>Substrand H:</b> The sex chromosomes contain different genes, and therefore, certain traits will show patterns of inheritance based on gender.</p>	<p>Organisms reproduce, develop, have predictable life cycles, and pass on heritable traits to their offspring.</p>	<p>How can our understanding of Mendelian genetics be used to predict patterns of inheritance?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 10<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>Hereditary descent with modification</li> <li>Diversity of Organisms</li> <li>Patterns of Inheritance</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>Non-Mendelian Genetics, Page 198</li> <li>Chromosomes and Phenotype, Page 200</li> <li>Critical Thinking, Page 203</li> <li>Patterns of Inheritance, Page 204</li> <li>Critical Thinking, Page 207</li> <li>Human Genetics and Pedigrees, Page 212</li> <li>Pedigree Charts, Page 215</li> <li>Critical Thinking, Page 217</li> <li>Hands-On Activity, Page 216</li> <li>STEM: Investigate how inherited disorders such as Huntington’s Disease, cystic fibrosis, rickets, or color blindness (among others) can be</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
			<p>controlled through the use of medical technology.</p> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Sex-Linked Inheritance, Page 202</li> <li>• Codominance, Page 208</li> <li>• Pedigree Analysis, Page 218</li> <li>• Incomplete Dominance, Page 219</li> <li>• Summative Assessment</li> </ul>
<p><b>Unit Seven: From DNA to Proteins</b> <b>Timeline: 12-15 Days</b></p>			
<p><b>Standard 6:</b> Life Processes</p> <p><b>Strand 1:</b> Structure/Function Relationship <b>Substrand F:</b> Cells store and use information to guide their functions. DNA molecules in each cell carry coded instructions for synthesizing protein molecules. The protein molecules have important structural and regulatory functions.</p>	<p>Living systems, from the organismic to the cellular level, demonstrate the complementary nature of structure and function.</p>	<p>How do mutations influence the survival of an organism/species and how can a change of a nucleotide in a gene affect the structure and function of the protein for which it codes?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 10<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>• Genes and Hormonal Balance</li> <li>• DNA and Mutation</li> <li>• DNA and Evolutionary Relationships</li> <li>• Genetic Manipulation</li> <li>• Mutations</li> <li>• Gene Expression</li> <li>• DNA and Cell</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Model Replication, Page 224</li> <li>• DNA as Genetic Material, Page 226</li> <li>• Critical Thinking, Page 228</li> <li>• DNA Structure, Page 230</li> <li>• Critical Thinking, Page 233</li> <li>• DNA Replication, Page 234, 237</li> <li>• Critical Thinking, Page 238</li> <li>• Critical Thinking, Page 142</li> <li>• Translation, Page 243, 246</li> <li>• Critical Thinking, Page 247</li> <li>• Gene Expression and Regulation, Page, 248</li> <li>• Critical Thinking, Page 251</li> <li>• Mutations, Page 253</li> <li>• Critical Thinking, Page 255</li> <li>• Hands-On Activity, Page 253</li> <li>• STEM: Investigate how technology is being used to study DNA replication in cancer cells or the cell cycle in any species.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Replication, Page 238</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
		Cycle <ul style="list-style-type: none"> <li>• Identification of DNA</li> <li>• DNA Transcription and Translation</li> <li>• DNA Replication</li> </ul>	<ul style="list-style-type: none"> <li>• Extracting DNA, 229</li> <li>• UV Light and Skin Cancer, Page 256</li> <li>• Modeling Transcription, Page 257</li> <li>• Summative Assessment</li> </ul>
<b>Unit Eight: Frontiers of Biotechnology</b> <b>Timeline: 10-14 Days</b>			
<p><b>Standard 7:</b> Diversity and Continuity of Living Things</p> <p><b>Strand 3:</b> Technology Applications  <b>Substrand A:</b> The expanding ability to manipulate genetic material, reproductive processes, and embryological development creates choices that raise ethical, legal, social, and public policy questions.  <b>Substrand B:</b> Recombinant DNA technology, which is a form of genetic engineering, involves the insertion of DNA from one cell of a different organism where the inserted DNA is expressed. Genetic engineering is being applied in biology, agriculture, and medicine in order to meet human wants and needs  <b>Substrand C:</b> DNA is analyzed to determine evolutionary relationships, study populations, identify individuals, and diagnose genetic disorders.</p>	<p>The development of technology has allowed us to apply our knowledge of genetics, reproduction, development and evolution to meet human needs and wants.</p>	<p>How does recombinant DNA technology, as it is applied to genetic engineering, meet human needs and wants?</p> <p><b><u>Learning Targets:</u></b></p> <p><b><u>GLEs: 10<sup>th</sup> Grade</u></b></p> <ul style="list-style-type: none"> <li>• Genetic Engineering Technology</li> <li>• Bacterial Transformation and Genetic Engineering</li> <li>• DNA Fingerprinting</li> </ul>	<p><b><u>Informal:</u></b></p> <ul style="list-style-type: none"> <li>• DNA Fingerprints, Page 262</li> <li>• Manipulating DNA, Page 264</li> <li>• Critical Thinking, Page 267</li> <li>• Copying DNA, Page 269</li> <li>• Critical Thinking, Page 271</li> <li>• DNA Fingerprinting, Page, 272</li> <li>• Critical Thinking, Page 274</li> <li>• Genetic Engineering, Page 275</li> <li>• Critical Thinking, Page 279</li> <li>• Genomics, Page 280</li> <li>• Critical Thinking, Page 283</li> <li>• Gene Screening Therapy, Page 284</li> <li>• Critical Thinking, Page 285</li> <li>• STEM: Research information about genetically modified organisms and investigate the risks and benefits of genetically modifying organisms.</li> </ul> <p><b><u>Formal:</u></b></p> <ul style="list-style-type: none"> <li>• Modeling Plasmids and Restriction Enzymes, Page 278</li> <li>• Modeling Forensics, Page 268</li> <li>• Modeling Genetic Engineering, Page 286</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
			<ul style="list-style-type: none"> <li>Genetic Screening, Page 287</li> <li>Summative Assessment</li> </ul>
<b>Unit Nine: Principles of Evolution</b> <b>Timeline: 12-15 Days</b>			
<p><b>Standard 7:</b> Diversity and Continuity of Living Things</p> <p><b>Strand 2:</b> Diversity and Evolution  <b>Substrand A:</b> Evolution is a change in allelic frequencies of a population over time. The theory of evolution is supported by extensive biochemical, structural, embryological, and fossil evidence.  <b>Substrand B:</b> The great diversity of organisms is the result of more than C.5 billion years of evolution that has filled every available niche with life forms. The millions of different species of plants, animals, and microorganisms that live on Earth today are related by descent with modification from common ancestors.  <b>Substrand C:</b> the process of natural selection occurs when some heritable variations that arise from random mutation and recombination give individuals within a species some survival advantages over others. These offspring with advantageous adaptations are more likely to survive and reproduce, thus increasing the proportion of individuals within a population with advantageous characteristics. When populations become isolated, these changes may accumulate and eventually result in a new species.</p>	<p>The diversity and changing of life forms over many generations is the result of natural selection, in which organisms with advantageous traits survive, reproduce, and pass those traits to offspring.</p>	<p>Why is diversity important to a species' ability to survive?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 10<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>Natural Selection</li> <li>Change Through Evolution</li> <li>Evidence of Evolution</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>Similar traits and Evolution, Page 296</li> <li>Early Ideas and Evolution, Page 298</li> <li>Critical Thinking, Page 301</li> <li>Charles Darwin, Page 302</li> <li>Critical Thinking, Page 303</li> <li>Natural Selection, Page 302</li> <li>Critical Thinking, Page 309</li> <li>Evolutionary Evidence, Page 310</li> <li>Critical Thinking, Page 314</li> <li>Hands-On Activity, Page 312</li> <li>Evolution and Biology Today, Page 316</li> <li>Critical Thinking, Page 319</li> <li>STEM: Investigate the evolution of thought over time using Darwin's Theory of Evolution as an example and infer how technology may change this theory in the future.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>Piecing Together Evidence, Page 313</li> <li>Predator-Prey Pursuit, Page 315</li> <li>Using Patterns to Make Predictions, Page 320</li> <li>Adaptations in Beaks, Page 321</li> <li>Summative Assessment</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit Ten: The Evolution of Populations</b> <b>Timeline: 10-14 Days</b>			
<p><b>Standard 7:</b> Diversity and Continuity of Living Things</p> <p><b>Strand 2:</b> Diversity and Evolution  <b>Substrand C:</b> the process of natural selection occurs when some heritable variations that arise from random mutation and recombination give individuals within a species some survival advantages over others. These offspring with advantageous adaptations are more likely to survive and reproduce, thus increasing the proportion of individuals within a population with advantageous characteristics. When populations become isolated, these changes may accumulate and eventually result in a new species.</p> <p><b>Substrand D:</b> Evolution does not proceed at the same rate in all populations; nor does it progress in a linear or set direction. Environmental changes have a strong influence on the evolutionary process. Other factors that influence evolution include; sexual selection, mutation, genetic drift and genetic modification.</p> <p><b>Substrand E:</b> Organisms are classified into a hierarchy of groups and subgroups based on similarities in structure, comparisons in DNA and protein and evolutionary relationships.</p> <p><b>Substrand F:</b> Genetically diverse populations are more likely to survive changing environments.</p>	<p>Genetic variations exist within populations</p> <p>The diversity and changing of life forms over many generations is the result of natural selection, in which organisms with advantageous traits survive, reproduce, and pass those traits to offspring.</p>	<p>Why is sexual reproduction important to the survival of most species?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 10<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>• Population Survival</li> <li>• Speciation Through Isolation</li> <li>• Genetics and Population Change</li> <li>• Genetic Drift, Mutation, and Competition for Resources</li> <li>• Sexual Role in Natural Selection.</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Phenotypic Variation, Page 326</li> <li>• Genetic Variation, Page 328</li> <li>• Critical Thinking, Page 329</li> <li>• Natural Selection, Page 330</li> <li>• Critical Thinking, Page 333</li> <li>• Gene Flow and Drift, Page 334</li> <li>• Critical Thinking, Page 338</li> <li>• Hands-On Activity, Page 336</li> <li>• Speciation Through Isolation, Page 344</li> <li>• Critical Thinking, Page 346</li> <li>• Evolutionary Patterns, Page 347</li> <li>• Critical Thinking, Page 351</li> <li>• STEM: Research what a population needs to survive. Investigate how the adoption or rejection of technology increases or diminishes the survival rate for a population.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Genetic Drift, Page 337</li> <li>• Natural Selection in African Swallowtails, Page 334</li> <li>• Investigating an Anole Lizard Population, Page 352</li> <li>• Exploring Adaptations, 353</li> <li>• Summative Assessment</li> </ul>
<b>Unit Eleven: The History of Life</b> <b>Timeline: 11-15 Days</b>			
<b>Standard 7:</b> Diversity and Continuity of	The diversity and changing of	How can the cell theory	<b>Informal:</b>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>Living Things</p> <p><b>Strand 2:</b> Diversity and Evolution  <b>Substrand B:</b> The great diversity of organisms is the result of more than C.5 billion years of evolution that has filled every available niche with life forms. The millions of different species of plants, animals, and microorganisms that live on Earth today are related by descent with modification from common ancestors.</p>	<p>life forms over many generations is the result of natural selection, in which organisms with advantageous traits survive, reproduce, and pass those traits to offspring.</p>	<p>explain the historical development of cells and explain how life evolved over time?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 10<sup>th</sup> Grade</b></p> <ul style="list-style-type: none"> <li>• Environmental Changes over time and Populations</li> <li>• Fossil Evidence and Ancestry</li> <li>• Geologic Time</li> <li>• Primate Evolution</li> </ul>	<ul style="list-style-type: none"> <li>• Making Fossils, Page 358</li> <li>• Fossil Record, Page 360</li> <li>• Critical Thinking, Page 363</li> <li>• Geologic Time Scale, Page 365</li> <li>• Critical Thinking, Page, 367</li> <li>• Origin of Life, Page 368</li> <li>• Critical Thinking, Page 371</li> <li>• Earliest Organisms, Page 372</li> <li>• Critical Thinking, Page 374</li> <li>• Radiation of Multicellular life, Page 376</li> <li>• Critical Thinking, Page 378</li> <li>• Primate Evolution, Page 379</li> <li>• Critical Thinking, Page 383</li> <li>• STEM: Investigate how technology has increased the life span of organisms predict how life may evolve in the future.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Geologic Clock, Page 381</li> <li>• Radioactive Decay, Page 364</li> <li>• Stride Inferences, Page 384</li> <li>• Understanding Geologic Time, Page 385</li> <li>• Summative Assessment</li> </ul>
<p><b>Unit Twelve: Nervous and Endocrine Systems</b>  <b>Timeline: 10-14 Days</b></p>			
<p><b>Standard 6:</b> Life Processes</p> <p><b>Strand 3:</b> Regulation and Behavior  <b>Substrand B:</b> Multi-cellular animals have nervous systems that generate behavioral responses. These responses result from interactions between organisms of the same</p>	<p>Organisms respond to internal and external cues, which allow them to survive.</p>	<p>How do cells communicate in order to maintain homeostasis within an organism?</p> <p><b>Learning Targets:</b></p> <p><b>GLEs: 10<sup>th</sup> Grade</b></p>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Homeostasis, Page 858</li> <li>• Critical Thinking, Page 861</li> <li>• Experience Versus Memory, Page 872</li> <li>• Organ Systems and Communication, Page 874</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
species, organisms of different species, and from environmental changes.		<ul style="list-style-type: none"> <li>• Homeostasis</li> <li>• Nervous and Immune systems.</li> </ul>	<ul style="list-style-type: none"> <li>• Critical Thinking, Page 875</li> <li>• Neurons, Page 876</li> <li>• Critical Thinking, Page 879</li> <li>• Hands-On Activity, Page 876</li> <li>• The Senses, Page 880</li> <li>• Critical Thinking, Page 883</li> <li>• Nervous Systems, Page 885</li> <li>• Critical Thinking, Page 890</li> <li>• Brain Function and Chemistry, Page 891</li> <li>• Critical Thinking, Page 894</li> <li>• STEM: Investigate how the technology of food preservation is the result of disturbing the process of homeostasis</li> </ul> <p><b><u>Formal:</u></b></p> <ul style="list-style-type: none"> <li>• Negative Feedback Loop, Page 861</li> <li>• Examining Human Cells, Page 866</li> <li>• Hormones and Homeostasis, Page 867</li> <li>• The Primary Sensory Cortex, Page 886</li> <li>• The Stroop Effect, Page 884</li> <li>• Reaction Time, Page 902</li> <li>• Brain Based disorders, Page 903</li> <li>• Modeling T Cell Activation, Page 964</li> <li>• What is an Autoimmune Disease, Page 965</li> </ul>

# Curriculum Framework for Advanced Placement Biology

School: Newark Charter

Curricular Tool: Biology: The Dynamic Science

Grade: 10

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit One: Molecules and Cells</b> <b>Timeline : 9 Weeks</b>			
<p><b>Standard 6:</b> Life Processes</p> <p><b>Strand 1:</b> Structure/Function Relationship  <b>Substrand A:</b> In order to establish and maintain their complex organization and structure, organisms must obtain, transform, and transport matter and energy, eliminate waste products, and coordinate their internal activities.  <b>Substrand B.</b> Cells take highly varied forms indifferent plants, animals, and microorganisms. Structural variations among cells determine the function each cell performs.  <b>Substrand C.</b> Cells have distinct and separate structures, which perform and monitor processes essential for survival of the cell. The highly specific function of each organelle is directly related to its structure.  <b>Substrand D:</b> The cell membrane is dynamic and interacts with internal membranous structures as materials are transported into and out of the cell.  <b>Substrand E:</b> The transport of materials across the membrane can be passive or active depending upon membrane structure and concentration gradients.  <b>Substrand H:</b> In multi-cellular organisms, cells perform specialized functions as parts of sub-systems, which work together to maintain optimum conditions for the benefit of the</p>	<p>The organization of life extends through several levels of a hierarchy.</p> <p>Cells are the basic units of life.</p> <p>Living organisms contain chemical instructions that govern their structure and function.</p> <p>Matter is organized into elements and atoms.</p> <p>Energy exists in different forms and states.</p> <p>Cells occur in prokaryotic and eukaryotic forms, each with distinctive structures and organization.</p> <p>Biological membranes contain both lipid and protein molecules.</p> <p>Cell communication is essential to orchestrate the activities of cells in multi-cellular organisms, and also takes place among single-celled organisms.</p>	<p><b>Essential Questions:</b>            How does structure relate to function in living systems from the organismal to the cellular level?             How is matter transferred and energy transferred/transformed in living systems?</p> <p><b>Learning Targets:</b>  <b>Chemistry of Life:</b></p> <ul style="list-style-type: none"> <li>• Water</li> <li>• Organic molecules in organisms</li> <li>• Free energy changes</li> <li>• Enzymes</li> </ul> <p>Cells:</p> <ul style="list-style-type: none"> <li>• Prokaryotic and eukaryotic cells</li> <li>• Membranes</li> <li>• Sub-cellular organization</li> <li>• Cell cycle and its regulation</li> </ul> <p>Cellular Energetics:</p> <ul style="list-style-type: none"> <li>• Coupled reactions</li> <li>• Fermentation and</li> </ul>	<p><b>Informal:</b>            Although there are no informal assessments provided for the AP units, there is information provided for each of the formal lab assessments that must be understood prior to lab performance. These concepts can be informally assessed through the following categories:</p> <ul style="list-style-type: none"> <li>• Classroom assignments</li> <li>• Notebook</li> <li>• Discussion</li> <li>• Essay</li> <li>• Homework</li> <li>• Formative Assessments.</li> </ul> <p><b>Formal Assessment:</b>            Labs:</p> <ul style="list-style-type: none"> <li>• Diffusion and Osmosis</li> <li>• Enzyme Catalysts</li> <li>• Mitosis and Meiosis (Done in Unit 2)</li> <li>• Plant Pigments and Photosynthesis</li> <li>• Cell Respiration</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>whole organism.</p> <p><b>Strand 2:</b> Matter and Energy Transformation  <b>Substrand A:</b> Cells carry out a variety of chemical transformations which allow conversion of energy from one form to another, the breakdown of molecules into smaller units, and the building of larger molecules from smaller ones. Most of these transformations are made possible by protein catalysts called enzymes.  <b>Substrand B:</b> Plant cells contain chloroplasts, which convert light energy into chemical energy through the process of photosynthesis. This chemical energy is used by the plants to convert carbon dioxide and water into glucose molecules, that may be used for energy or to form plant structures. Photosynthesis adds oxygen to the atmosphere and removes carbon dioxide.  <b>Substrand C:</b> all organisms, including plants, use the process of cellular respiration to transform stored energy into food molecules into usable energy. The energy produced is stored in the form of ATP and is used by organisms to conduct their life processes. Cellular respiration may require oxygen and adds carbon dioxide to the atmosphere.  <b>Substrand D:</b> Photosynthesis and cellular respiration are complementary processes resulting in the flow of energy and the cycling of matter in ecosystems.</p>		<p>cellular respiration</p> <ul style="list-style-type: none"> <li>• Photosynthesis</li> </ul>	
<p><b>Unit Two: Heredity and Evolution</b>  <b>Timeline: 9 Weeks</b></p>			
<p><b>Standard 6:</b> Life Processes</p> <p><b>Strand 1:</b> Structure/Function Relationship</p>	<p>Plants and almost all other organisms obtain energy for cellular activities through</p>	<p><b>Essential Questions:</b>  How is genetic information passed through generations?</p>	<p><b>Informal:</b>  Although there are no informal assessments provided for the AP units,</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p><b>Substrand F:</b> Cells store and use information to guide their functions. DNA molecules in each cell carry coded instructions for synthesizing protein molecules. The protein molecules have important structural and regulatory functions.</p> <p><b>Standard 7:</b> Diversity and Continuity of Living Things</p> <p><b>Strand 1:</b> Reproduction, Heredity, and Development</p> <p><b>Substrand A:</b> Hereditary/genetic information in chromosomes is contained in molecules of DNA. Genes are sections of DNA that direct syntheses of specific proteins associated with traits in organisms. These consist of various combinations of four different nucleotides that encode this information through their sequences.</p> <p><b>Substrand B:</b> Known patterns of inheritance can be used to make predictions about genetic variation.</p> <p><b>Substrand C:</b> Mutations in DNA of organisms normally occur spontaneously at low rates, but can occur at higher rates. Most mutations have no effect on the organism, but some may be beneficial or harmful depending on the environment.</p> <p><b>Substrand D:</b> Only random mutations in gametes can create the variation that is inherited by an organism's offspring. Somatic mutations are not inherited, but may lead to cell death, uncontrolled cell growth, or cancer.</p> <p><b>Substrand E:</b> during the cell cycle, DNA of the parent cell replicates and the cell divides into two cells that are identical to the parent. This process is used for growth and repair of</p>	<p>cellular respiration.</p> <p>Mitosis is the basis for growth and maintenance of body mass in multi-celled eukaryotes, and for the reproduction of many single-celled eukaryotes.</p> <p>Enzymatic proteins are the essential catalysts of every step in DNA replication.</p> <p>Proteins are genetically specific</p>	<p>How do organisms change as they go through their live cycles?</p> <p><b><u>Learning Targets:</u></b></p> <p>Heredity:</p> <ul style="list-style-type: none"> <li>• Meiosis and gemetogenesis</li> <li>• Eukaryotic chromosomes</li> <li>• Inheritance patterns</li> </ul> <p>Molecular Genetics:</p> <ul style="list-style-type: none"> <li>• RNA and DNA structure and function</li> <li>• Gene regulation</li> <li>• Mutation</li> <li>• Viral structure and replication</li> <li>• Nucleic acid technology and applications</li> </ul> <p>Evolutionary Biology:</p> <ul style="list-style-type: none"> <li>• Early evolution of life</li> <li>• Evidence for evolution</li> <li>• Mechanisms of evolution</li> </ul>	<p>there is information provided for each of the formal lab assessments that must be understood prior to lab performance. These concepts can be informally assessed through the following categories:</p> <ul style="list-style-type: none"> <li>• Classroom assignments</li> <li>• Notebook</li> <li>• Discussion</li> <li>• Essay</li> <li>• Homework</li> <li>• Formative Assessments.</li> </ul> <p><b><u>Formal Assessment:</u></b></p> <p>Labs:</p> <ul style="list-style-type: none"> <li>• Mitosis and Meiosis</li> <li>• Molecular Biology</li> <li>• Genetics of Organisms</li> <li>• Population Genetics and Evolution</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>body tissues and for asexual reproduction.</p> <p><b>Substrand F:</b> Meiosis is the production of sex cells. The production and release of these gametes is controlled by hormones. In meiosis, the number of chromosomes is reduced by one-half and chromosomes may randomly exchange homologous parts to create new chromosomes with combinations not necessarily found in the parent cell. This may increase variation within the species.</p> <p><b>Substrand G:</b> Upon fertilization, the fusion of the gametes restores the original chromosome number, and new gene combinations lead to increased genetic variation, which, in turn, increases the likelihood of survival of the species.</p> <p><b>Substrand H:</b> The sex chromosomes contain different genes, and therefore, certain traits will show patterns of inheritance based on gender.</p> <p><b>Strand 2: Diversity and Evolution</b></p> <p><b>Substrand A:</b> Evolution is a change in allelic frequencies of a population over time. The theory of evolution is supported by extensive biochemical, structural, embryological, and fossil evidence.</p> <p><b>Substrand B:</b> The great diversity of organisms is the result of more than 3.5 billion years of evolution that has filled every available niche with life forms. The millions of different species of plants, animals, and microorganisms that live on Earth today are related by descent with modification from common ancestors.</p>			

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit Three: Organisms and Populations</b> <b>Timeline: 18 Weeks</b>			
<p><b>Standard 6:</b> Life Processes</p> <p><b>Strand 3:</b> Regulation and Behavior  <b>Substrand B:</b> Multi-cellular animals have nervous systems that generate behavioral responses. These responses result from interactions between organisms of the same species, organisms of different species, and from environmental changes.</p> <p><b>Standard 7:</b> Diversity and Continuity of Living Things</p> <p><b>Strand 1:</b> Reproduction, Heredity, and Development</p> <p><b>Substrand I:</b> Embryological development in plants and animals involves a series of orderly changes in which cells divide and differentiate. Development is controlled by genes whose expression is influenced by internal factors and may also be influenced by environmental factors. Alteration in this balance may interfere with normal growth and development.</p> <p><b>Strand 2:</b> Diversity and Evolution  Substrand C: The process of natural selection occurs when some heritable variations that arise from random mutation and recombination give individuals within a species some survival advantages over others. These offspring with advantageous adaptations are more likely to survive and reproduce, this increasing the proportion of individuals within a population with</p>	<p>Biological evolution occurs in populations when specific processes cause the genomes of organisms to differ from those of their ancestors.</p> <p>Phenotypic variation can be described quantifiably or qualitatively.</p> <p>Natural selection shapes genetic variability by favoring some traits over others.</p> <p>Identifying species can be done morphologically or biologically.</p> <p>Fossils form when organisms are buried by sediments or preserved in oxygen-poor environments.</p>	<p><b>Essential Questions:</b></p> <p>How does natural selection encourage inter and intra-specific diversity of organisms over time?</p> <p>How do responses to internal and external cues aid in an organism’s survival?</p> <p>How can what we do benefit the health of humans and other organisms?</p> <p><b>Learning Targets:</b></p> <p>Diversity of Organisms:</p> <ul style="list-style-type: none"> <li>• Evolutionary patterns</li> <li>• Survey of the diversity of life</li> <li>• Phylogenetic classification</li> <li>• Evolutionary Relationships</li> </ul> <p>Structure and Function of Plants and Animals:</p> <ul style="list-style-type: none"> <li>• Reproduction, growth, and development</li> <li>• Structural, Physiological, and behavioral adaptations</li> <li>• Response to the environment</li> </ul> <p>Ecology:</p> <ul style="list-style-type: none"> <li>• Population dynamics</li> </ul>	<p><b>Informal:</b></p> <p>Although there are no informal assessments provided for the AP units, there is information provided for each of the formal lab assessments that must be understood prior to lab performance. These concepts can be informally assessed through the following categories:</p> <ul style="list-style-type: none"> <li>• Classroom assignments</li> <li>• Notebook</li> <li>• Discussion</li> <li>• Essay</li> <li>• Homework</li> <li>• Formative Assessments.</li> </ul> <p><b>Formal Assessment:</b></p> <p>Labs:</p> <ul style="list-style-type: none"> <li>• Transpiration</li> <li>• Physiology of the Circulatory System</li> <li>• Animal Behavior</li> <li>• Dissolved Oxygen and Aquatic Primary Productivity</li> </ul> <p>AP Exam</p>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>advantageous characteristics. When populations become isolated, these changes may accumulate and eventually result in new species.</p> <p><b>Substrand D:</b> Evolution does not proceed at the same rate in all populations; nor does it progress in a linear or set direction. Environmental changes have a strong influence on the evolutionary process. Other factors that influence evolution include: sexual selection, mutation, genetic drift, and genetic modification.</p> <p><b>Substrand E:</b> Organisms are classified into a hierarchy of groups and subgroups based on similarities in structure, comparisons in DNA and protein and evolutionary relationships.</p> <p><b>Substrand F:</b> Genetically diverse populations are more likely to survive changing environments.</p> <p><b>Substrand G:</b> Biological evolution is the foundation for modern biology and is used to make predictions for medical, environmental, agricultural and other societal purposes.</p> <p><b>Standard 8:</b> Ecology</p> <p><b>Strand 1:</b> Interactions within the Environment</p> <p><b>Substrand A:</b> Earth's ecosystems are interconnected by biological, chemical, and physical processes. Changes in one ecosystem may have local and/or global consequences.</p> <p><b>Substrand B:</b> Organisms both cooperate and compete in ecosystems. The interrelationships and interdependencies of these organisms may generate complex ecosystems that are stable over long periods of time and tend to have cyclic fluctuations around an equilibrium.</p>		<ul style="list-style-type: none"> <li>• Communities and ecosystems</li> <li>• Global issues</li> </ul>	

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p><b>Substrand C:</b> Ecosystems undergo major changes as a result of such factors as climate change, introduction of new species, and habitat destruction. These can be the result of natural processes and /or human impact.</p> <p><b>Substrand D:</b> Changes in the physical, chemical, or biological conditions of an ecosystem can alter the diversity of species in the system. Over time, ecosystems change and population of organisms adapt, move, or become extinct.</p> <p><b>Substrand E:</b> The carrying capacity for a specific population in an ecosystem depends on the resources available. Given adequate biotic and abiotic resources and no disease or predators, populations increase at rapid rates. Resources, predation and climate, limit growth of populations in specific niches in an ecosystem.</p> <p><b>Substrand F:</b> Populations can increase through exponential growth. Higher populations result in competition for limited resources and increases in environmental pollution.</p>			

# Curriculum Framework for Chemistry

School: Newark Charter

Curricular Tool: Chemistry-Glencoe

Grade: 11

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit One: Atomic Structure</b> <b>Timeline : 6-10 Days</b>			
<p><b>Standard 2:</b> Materials and Their Properties  <b>Strand 1:</b> Properties and Structures of Materials  <b>Substrand A:</b> All matter is composed of minute particles called atoms. Most of the mass of an atom is concentrated in the nucleus. In the nucleus, there are neutrons with no electrical charge and positively charged protons. Negatively charged electrons surround the nucleus and overall, the atom is electrically neutral.  <b>Substrand C:</b> Isotopes of a given element differ in the number of neutrons in the nucleus. Their chemical properties remain essentially the same.</p> <p><b>Strand 3:</b> Conservation of Matter,  <b>Substrand B:</b> Radioactive isotopes are unstable and undergo spontaneous and predictable nuclear reactions emitting particles and/or radiation, and become new isotopes that can have very different properties. In these nuclear changes, the total of the mass and energy remains the same.  <b>Standard 3:</b> Energy and Its Effects, <b>Strand 2:</b> Forces and the Transfer of Energy  <b>Substrand A:</b> Forces change the motion of objects. Newton’s Laws can be used to predict these changes.  <b>Substrand F:</b> Electric forces between charged objects are attractive or repulsive.</p>	<p>The structures of materials determine their properties.</p> <p>When materials interact within a closed system, the total mass of the system remains the same.</p> <p>When materials interact within a closed system, the total mass of the system remains the same.</p> <p>Changes take place because of the transfer of energy. Energy is transferred to matter through the action of forces. Different forces are responsible for the transfer of the different forms of energy.</p>	<p>How do the structures of materials determine their properties?</p> <p><b>Learning Targets:</b></p> <p><u>GLEs 11<sup>th</sup> grade:</u></p> <ul style="list-style-type: none"> <li>• Evolution of Scientific Thought</li> <li>• Atoms and Atomic Structure</li> <li>• Periodic Table</li> <li>• Lewis Dots Structures</li> <li>• Isotopes</li> <li>• Radioactive Decay</li> <li>• Alpha, Beta, Gamma Radiation</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Describe the evolution of scientific thought concerning the atoms and elements, Pages 50,228</li> <li>• Outline the characteristics of the major particles in the atom, Page 63</li> <li>• Characteristics of Elements in a Group and in a Period on the Periodic Table, Page 92</li> <li>• Electromagnetic Spectrum, Page 68</li> <li>• Compare and contrast isotopes and radioactive isotopes, Pages 60, 752</li> <li>• Radioactive Decay, Page 743</li> <li>• Define the value and problems associated with radioactive decay, Page 752</li> <li>• STEM: Determine the relationship between a Microwave for cooking food and the Electromagnetic Spectrum. Then investigate how the technology that led to Microwave ovens may be extended to other applications for human use.</li> </ul> <p><b>Formal: (Atomic Structure):</b></p> <ul style="list-style-type: none"> <li>• Predicting Properties, Page 87</li> <li>• Periodic Table of The Elements, Page 98</li> <li>• Modeling Isotopes, Page 61,</li> <li>• Modeling Radioactive Decay, Page</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>The electric forces between electrons and protons are attractive, determine the structure of atoms, and are involved in all chemical reactions. The electromagnetic forces acting between atoms or molecules are much stronger than the gravitational forces between the same atoms or molecules and are responsible for many common forces such as friction, tensions and supporting forces.</p>			<p>748</p> <ul style="list-style-type: none"> <li>Summative Assessment</li> </ul>
<p><b>Unit Two: Electron Configuration</b> <b>Timeline: 5-7 Days</b></p>			
<p><b>Standard 2:</b> Materials and Their Properties <b>Strand 1:</b> Properties and Structure of Materials <b>Substrand B:</b> Elements and compounds are pure substances. Elements cannot be decomposed into simpler materials by chemical reactions. Elements can react to form compounds. Elements and/or compounds may also be physically combined to form mixtures. <b>Substrand E:</b> An atom's electron structure determines its physical and chemical properties. Metals have valence electrons that can be modeled as a sea of electrons where the valence electrons move freely and are not associated with individual atoms. These freely moving electrons explain the metallic properties such as conductivity, malleability, and ductility.</p> <p><b>Standard 3:</b> Energy and Its Effects <b>Strand 3:</b> Energy Interacting With Materials <b>Substrand F:</b> When radiant energy is absorbed or emitted by individual atoms or molecules, the changes in energy involve the jump of an electron from one distinct energy level to another.</p>	<p>The structures of materials determine their properties.</p> <p>Energy readily transforms from one form to another, but these transformations are not always reversible. The details of these transformations depend upon the initial form of the energy and the properties of the materials involved. Energy may transfer into or out of a system and it may change forms, but the total energy cannot change.</p>	<p>Why do elements of the same group on the Periodic Table have similar characteristics?</p> <p><b>Learning Targets:</b></p> <p><u>GLEs 11<sup>th</sup> Grade</u></p> <ul style="list-style-type: none"> <li>Atomic Structure of Elements and Compounds</li> <li>Lewis Dot Structures</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>Electron configurations of elements, Page 242</li> <li>Determining the number of valence electrons for various elements, Pages 76, 241</li> <li>Lewis Dot Structure of various elements, Page 77</li> <li>Relative energy levels of the spdf orbits, Page 240</li> <li>STEM: Investigate how gemstones used for making jewelry get their colors in nature. Then investigate how color can be added to man-made glass. Can color be added to plastics using this process? Explain.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>Versatile Materials, Page 83</li> <li>Iron Versus Rust, Page 120</li> <li>Review Strategies, Page 78, Lewis Dot Diagrams</li> <li>Line Spectra, Pages 68, 75</li> <li>Flame Tests, Page 232</li> <li>Summative Assessment</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit Three: Ions</b> <b>Timeline: 4-6 Days</b>			
<p><b>Standard 2:</b> Materials and Their Properties  <b>Strand 1:</b> Properties and Structures of Materials</p> <p><b>Substrand A:</b> All matter is composed of minute particles called atoms. Most of the mass of an atom is concentrated in the nucleus. In the nucleus, there are neutrons with no electrical charge and positively charged protons. Negatively charged electrons surround the nucleus and overall, the atom is electrically neutral.</p> <p><b>Substrand D:</b> The periodic table arranges the elements in order of atomic number (the number of protons). The elements are grouped according to similar chemical and physical properties. Properties vary in a regular pattern across the rows (periods) and down the columns (families or groups). As a result, an element’s chemical and physical properties can be predicted knowing only its position on the periodic table.</p> <p><b>Substrand F:</b> Ionic compounds form when atoms transfer electrons. Covalent compounds form when atoms share electrons. Both types of interactions generally involve valence electrons and produce chemical bonds that determine the chemical property of the compound.</p>	<p>The structures of materials determine their properties.</p>	<p>How do ions form, how is an ionic charge determined, and how is the ionic radii related to the atomic reactivity of an element?</p> <p><b>Learning Targets:</b></p> <p><u>GLEs: 11<sup>th</sup> Grade</u></p> <ul style="list-style-type: none"> <li>• Transfer of Electrons</li> <li>• Ionic Charges</li> <li>• Ionic compounds</li> <li>• Ionic Reactivity</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Transferring Electrons. Page 131</li> <li>• Predicting Ionic Charges. Page 154</li> <li>• Ionic Compounds. Page 132</li> <li>• The Octet Rule. Page 129</li> <li>• STEM: Investigate why detergents are more effective than soaps in hard water?</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• The formation of Ionic Compounds. Page 133</li> <li>• The Formation and Decomposition of Zinc Iodide, Page 134</li> <li>• Trends in atomic Radii, page 260</li> <li>• Summative Assessment</li> </ul>
<b>Unit Four: Chemical Bonding</b> <b>Timeline: 5-6 Days</b>			
<p><b>Standard 2:</b> Materials and Their Properties  <b>Strand 1:</b> Properties and Structure of Materials</p> <p><b>Substrand E:</b> An atom’s electron structure determines its physical and chemical properties. Metals have valence electrons</p>	<p>The structures of materials determine their properties.</p>	<p>How do the types of chemical bonding affect the way we can use a material?</p> <p><b>Learning Targets:</b></p>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Chemical Bonding, Page 300</li> <li>• Ionic and Covalent Bonding, Page 300</li> <li>• Ionic and Metallic Bonding, Page 311</li> <li>• STEM: Investigate the relationship between Linus Pauling’s work</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>that can be modeled as a sea of electrons where the valence electrons move freely and are not associated with individual atoms. These freely moving electrons explain the metallic properties such as conductivity, malleability, and ductility.</p> <p><b>Substrand F:</b> Ionic compounds form when atoms transfer electrons. Covalent compounds form when atoms share electrons. Both types of interactions generally involve valence electrons and produce chemical bonds that determine the chemical property of the compound.</p> <p><b>Substrand G:</b> A change in physical properties does not change the chemical composition of the substance. The physical properties of elements and compounds (such as melting and boiling points) reflect the nature of the interactions among their atoms, ions, or molecules and the electrical forces that exist between.</p>		<p><u>GLEs: 11<sup>th</sup> Grade</u></p> <ul style="list-style-type: none"> <li>• Chemical Bonding</li> <li>• Types of Bonding</li> <li>• Lewis Dot Structures to distinguish between Ionic and Covalent bonding</li> </ul>	<p>concerning understanding chemical bonds with the discovery of the structure of DNA.</p> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Separating Candy Colors, Page 326</li> <li>• Ionic and Covalent Compounds, Page 170</li> <li>• Lewis Dot Gumdrops models for NaCl, SiO<sub>2</sub>, O<sub>2</sub>, H<sub>2</sub>, CO<sub>2</sub>, Page 313 (GLE compounds) and/or Model Molecules, Page 323</li> <li>• Summative Assessment</li> </ul>
<p><b>Unit Five: Writing and Naming Chemical Formulas</b> <b>Timeline: 3-5 Days</b></p>			
<p><b>Standards:</b> No Standards</p> <p><b>GLE:</b> Determine how the mass of the products compares to the mass of the reactants in chemical investigations. Show how this comparison links to the appropriate balanced chemical equation.</p>	<p>The mass of products is equivalent to the mass of the reactants in a chemical equation.</p>	<p>How does the naming of ionic compounds differ from the naming of covalent compounds?</p> <p><b>Learning Targets:</b></p> <p><u>GLEs: 11<sup>th</sup> Grade</u></p> <ul style="list-style-type: none"> <li>• Ionic Compounds</li> <li>• Covalent Compounds</li> <li>• Balanced Chemical Equation</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Chemical Formulas for Ionic Compounds, Page 153, 156</li> <li>• Chemical Formulas for Covalent Compounds, Page 168</li> <li>• STEM: No STEM application</li> </ul> <p><b>Formal</b></p> <ul style="list-style-type: none"> <li>• Variable Oxidation States, Page 154</li> <li>• Chemical Bonds in Bone, Page 169</li> <li>• Ionic or Covalent Compounds, Page 170</li> <li>• Summative Assessment</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<b>Unit Six: Chemical Reactions and Equations</b> <b>Timeline: 8-10 Days</b>			
<p><b>Standard 2:</b> Materials and Their Properties  <b>Strand 3:</b> Conservation of Matter <b>Substrand A:</b> The total mass of the system remains the same regardless of how atoms and molecules in a closed system interact with one another, or how they combine or break apart.</p> <p><b>Strand 4:</b> Chemical Reactions <b>Substrand A:</b> Chemical reactions result in new substances with properties that are different from those of the component parts (reactants).  <b>Substrand B:</b> There are different types of chemical reactions. Precipitation reactions produce insoluble substances (e.g., double replacement). The transfer of electrons between atoms is a reduction-oxidation (redox) reaction (e.g., single-replacement combustion, synthesis, decomposition). Some acid/base reactions involve the transfer of hydrogen ions  <b>Substrand C:</b> The rate of a chemical reaction depends on the properties and concentration of the reactants, temperature, and the presence or absence of a catalyst.  <b>Substrand D:</b> Energy is transformed in chemical reactions. Energy diagrams can illustrate this transformation. Exothermic reactions release energy. Endothermic reactions absorb energy.  <b>Substrand E:</b> A catalyst lowers the activation energy of a chemical reaction. The catalyst remains unchanged and is not consumed in the overall reaction. Enzymes are protein molecules that catalyze chemical reactions in living systems.</p> <p><b>Standard 3:</b> Energy and Its Effects <b>Strand</b></p>	<p>When materials interact within a closed system, the total mass of the system remains the same.</p> <p>There are several ways in which elements and/or compounds react to form new substances and each reaction involves energy.</p> <p>Energy takes many forms. These forms can be grouped into types of energy that are associated with the motion of mass (kinetic energy), and types of energy associated with the position of mass and with energy fields (potential energy).</p>	<p>How does the Law of Conservation of Mass apply to the interaction of materials in a closed system?</p> <p><b>Learning Targets:</b></p> <p><u>GLEs: 11<sup>th</sup> Grade</u></p> <ul style="list-style-type: none"> <li>• Law of Conservation of Mass</li> <li>• Chemical Reactions</li> <li>• Chemical Formulae</li> <li>• Chemical Equations</li> <li>• Nuclear Reactions</li> <li>• Catalysts</li> <li>• Energy Reaction Diagrams</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Chemical Reactions, Page 188</li> <li>• Chemical Equations, Page 190</li> <li>• Electrolysis or Water, Page 192</li> <li>• Balanced Chemical Equations, Page 196</li> <li>• Nature of Reactions, Page 208</li> <li>• Nuclear Reactions, Page 742</li> <li>• Cloud Chamber, Page 742</li> <li>• A Model Science, Page 198</li> <li>• Catalysts, Page 220</li> <li>• Energy Reaction Diagrams, Page 707</li> <li>• STEM: Investigate the discovery of bleach and why it is used to remove stains. Does bleach remove stains better than other chemical formulas</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Observe a chemical reaction, Page 187</li> <li>• Energy Change, Page 194</li> <li>• A simple Exchange, Page 203</li> <li>• Explore Chemical Changes, Page 204</li> <li>• Starch-Iodine Clock Reaction, Page 218</li> <li>• Heat In, Heat Out, Page 708</li> <li>• Summative Assessment</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p><b>1:</b> The Forms and Sources of Energy  <b>Substrand F:</b> Chemical energy is derived from the making and breaking of chemical bonds.</p>			
<p><b>Unit Seven: Chemical Quantities</b>  <b>Timeline: 4-6 Days</b></p>			
<p><b>Standard 2:</b> Materials and Their Properties  <b>Strand 2:</b> Mixtures and Solutions <b>Substrand A:</b> Properties of solutions, such as pH, solubility, and electrical conductivity depend upon the concentration and interactions of the solute and solvents.</p>	<p>The properties of a mixture are based on the properties of its components.</p>	<p>How is molarity calculated?</p> <p><b>Learning Targets:</b></p> <p><u>GLEs: 11<sup>th</sup> Grade</u></p> <ul style="list-style-type: none"> <li>• Solutions</li> <li>• Molarity</li> <li>• Unknown concentrations in a solution</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Solutions, Page 451</li> <li>• Molarity, Page 460</li> <li>• Solution concentration, Page 458</li> <li>• STEM: Investigate the invention of hot and cold packs and how they work to alleviate injuries. Could this invention have other applications? Explain.</li> <li>• STEM: Investigate why Antifreeze is a good coolant for the radiator of an automobile. Could another solution be used as effectively? Explain.</li> </ul> <p><b>Formal:</b></p> <ul style="list-style-type: none"> <li>• Solution Formation, Page 434</li> <li>• Solutions and Their Properties, Page 451</li> <li>• Hard and Soft Water, Page 452</li> <li>• Identify Solutions, Page 456</li> <li>• Summative Assessment</li> </ul>
<p><b>Unit Eight: Stoichiometry</b>  <b>Timeline: 5-7 Days</b></p>			
<p><b>Standard 2:</b> Materials and Their Properties  <b>Strand 3:</b> Conservation of Matter <b>Substrand A:</b> The total mass of the system remains the same regardless of how atoms and molecules in a closed system interact with one another, or how they combine or break apart.</p>	<p>When materials interact within a closed system, the total mass of the system remains the same.</p>	<p>How can we measure the quantity of a material in solution?</p> <p><b>Learning Targets:</b></p> <p><u>GLEs: 11<sup>th</sup> Grade</u></p> <ul style="list-style-type: none"> <li>• Stoichiometry</li> <li>• Law of Conservation of</li> </ul>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Stoichiometry, Page 404</li> <li>• Molar Mass, Page 406</li> <li>• Molar Mass of a compound, Page 408</li> <li>• Molar Ratios, Page 421</li> <li>• Molar Calculations, Page 414</li> <li>• STEM: Investigate the invention of</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
		Mass <ul style="list-style-type: none"> <li>• Expression of various quantities of matter in terms of moles</li> <li>• Molar calculations</li> </ul>	air bags and how air bags save lives in an automobile crash. Could this invention have other applications? Explain.  <b>Formal:</b> <ul style="list-style-type: none"> <li>• How much is a mole? Page 403</li> <li>• Counting by Mass, Page 408</li> <li>• Determine the Amount of a Reactant, Page 418</li> <li>• Analyze a Mixture, Page 422</li> <li>• Summative Assessment</li> </ul>
<b>Unit Nine: Gas</b> <b>Timeline: 5-7 Days</b>			
<b>Standards 2:</b> Materials and Their Properties <b>Strand 1:</b> Properties and Structures of Materials <b>Substrand I:</b> Temperature, pressure, and volume are important properties of a gas. A change in two of these properties results in predictable changes in the third.	The structures of materials determine their properties.	Why are temperature, pressure and volume important properties of a gas?  <b>Learning Targets:</b>  <u>GLEs: 11<sup>th</sup> Grade</u> <ul style="list-style-type: none"> <li>• Kinetic Molecular Theory</li> <li>• Changes in gas volume, pressure, and Temperature</li> <li>• Boyles Law</li> <li>• Charles's Law</li> </ul>	<b>Informal:</b> <ul style="list-style-type: none"> <li>• Gas Pressure, Page 370</li> <li>• Temperature, Pressure and Volume, Page 372</li> <li>• Boyles Law, Page 380</li> <li>• Charles Law, Page 389</li> <li>• STEM: Investigate Tire Gauges; How do they work and how do they work differently under varying conditions?</li> </ul> <b>Formal:</b> <ul style="list-style-type: none"> <li>• Volume and Temperature of a Gas, Page 368</li> <li>• Mass and Volume of a Gas, Page 373</li> <li>• How Straws Work, Page 384</li> <li>• Boyles Law, Page 386</li> <li>• Summative Assessment</li> </ul>
<b>Unit Ten: Solutions, Acids, Bases</b> <b>Timeline: 5-7 Days</b>			
<b>Standard 2:</b> Materials and Their Properties <b>Strand 2:</b> Mixtures and Solutions, <b>Substrand A:</b> Properties of solutions, such	The properties of a mixture are based on the properties of its components.	How do the properties of solutions, such as pH, solubility, and electric conductivity depend upon the	<b>Informal:</b> <ul style="list-style-type: none"> <li>• Buffers and pH, Page 531</li> <li>• Acid and Base Reactions, Page 516</li> </ul>

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
<p>as pH, solubility, and electrical conductivity depend upon the concentration and interactions of the solute and solvents.</p> <p><b>Strand 4:</b> Chemical Reactions, <b>Substrand B:</b> There are different types of chemical reactions. Precipitation reactions produce insoluble substances (e.g., double replacement). The transfer of electrons between atoms is a reduction-oxidation (redox) reaction (e.g., single-replacement combustion, synthesis, decomposition). Some acid/base reactions involve the transfer of hydrogen ions.</p>	<p>There are several ways in which elements and/or compounds react to form new substances and each reaction involves energy.</p>	<p>concentration and interactions of the solute and solvents?</p> <p><b><u>Learning Targets:</u></b></p> <p><u>GLEs: 11<sup>th</sup> Grade</u></p> <ul style="list-style-type: none"> <li>• Solute and solubility</li> <li>• Solutions</li> <li>• pH, solubility, and electric conductivity of solutions</li> <li>• Interactions of solute and solvents</li> </ul>	<ul style="list-style-type: none"> <li>• Acid-Base Titrations, Page 539</li> <li>• Solutes and solvents, Page 23</li> <li>• Conductivity, Page 311</li> <li>• STEM: Investigate a variety of “cures” for hiccups. Choose the cure you think is best and explain how and why chemistry supports that cure.</li> </ul> <p><b><u>Formal:</u></b></p> <ul style="list-style-type: none"> <li>• Buffers, Page 525</li> <li>• Acid, Base, or Neutral, Page 518</li> <li>• Titration of Vinegar, Page 544</li> <li>• Summative Assessment</li> </ul>
<p><b>Unit Eleven: Organic Chemistry</b> <b>Timeline: 5-7 Days</b></p>			
<p><b>Standard 2:</b> Materials and Their Properties <b>Strand 4:</b> Chemical Reactions <b>Substrand F:</b> Certain small molecules (monomers) react with one another in repetitive fashion (polymerization) to form long chain macromolecules (polymers). The properties of the macromolecules depend on the properties of the molecules used in their formation and on the lengths and structure of the polymer chain. Polymers can be natural or synthetic.</p> <p><b>Strand 5:</b> Material Technology <b>Substrand A:</b> Materials’ properties determine their use. New materials can improve the quality of life. However, their development and production often raise social, economic, and environmental issues that require analyses of the risks and benefits.</p>	<p>There are several ways in which elements and/or compounds react to form new substances and each reaction involves energy.</p> <p>People develop new materials as a response to the needs of society and the pursuit of knowledge. This development may have risks and benefits to humans and the environment.</p>	<p>How do monomers react with one another in a repetitive fashion to form long chain macromolecules?</p> <p><b><u>Learning Targets:</u></b></p> <p><u>GLEs: 11<sup>th</sup> Grade</u></p> <ul style="list-style-type: none"> <li>• Polymers</li> <li>• Monomers</li> <li>• Chemical structure of polymers</li> <li>• Structure of materials and their uses</li> </ul>	<p><b><u>Informal:</u></b></p> <ul style="list-style-type: none"> <li>• Organic compounds, Page 622</li> <li>• Alkanes, Alkenes, Alkynes, Page 623</li> <li>• The Active Alkane, Page 636</li> <li>• Alcohols, Acids, and Esters, Page 643</li> <li>• STEM: Research Kevlar and Gortex to determine how their individual chemistries determined their use in society. Are there other uses for these materials? Explain.</li> </ul> <p><b><u>Formal:</u></b></p> <ul style="list-style-type: none"> <li>• Model Simple Hydrocarbons, Page 621</li> <li>• Test for Unsaturated Oil, Page 630</li> <li>• A Synthetic Aroma, Page 645</li> <li>• Identify Polymers, Page 649</li> <li>• Absorbent Polymers, Page 652</li> <li>• Summative Assessment</li> </ul>

# Curriculum Framework for Spanish

School: Newark Charter School

Curricular Tool: N/A

Course: Level 1

Standards Alignment	Unit Concepts	Essential Questions	Assessments
<b>Unit One: Mucho gusto</b> <b>Timeline : 3 weeks</b>			
<p>1.1-Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p>1.3- Students write or tell about products or practice of their own culture or the target language cultures. They use language supported by visual cues such as posters, pictures, props, etc</p> <p>2.1-Students observe, identify and discuss simple patterns of behavior or interaction in various settings such as school, family and the community in the target language cultures.</p>	<p>Across the globe, people have different concepts of greetings and salutations.</p> <p>Greetings</p> <p>Introductions</p> <p>Alphabet</p> <p>Numbers 0-30</p> <p>Spanish-speaking countries &amp; capitals</p> <p>Days of the week</p> <p>Weather</p> <p>Classroom expressions.</p> <p>.</p>	<p><b>Essential Questions:</b> How do students introduce themselves?</p> <p>How do people from other cultures introduce themselves?</p>	<p><b>Informal:</b> Interactive Word Wall Questioning Journaling Observation of oral discourse</p> <p><b>Formal Assessment:</b> Vocabulary quizzes Oral Presentation Rubrics Self Assessment</p>
<b>Unit Two: Tiempo con amigos</b> <b>Timeline: 6 weeks</b>			
<p>1.1-Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p>1.3- Students write or tell about products or practice of their own culture or the target language cultures. They use language supported by visual cues such as posters, pictures, props, etc</p> <p>2.1- Students observe, identify and discuss simple patterns of</p>	<p>While differences exist due to culture and geography, students around the world share many common interests and join in similar activities.</p> <p>Pasttimes</p>	<p><b>Essential Questions:</b> What do students like to do and how does that compare with students from around the globe?</p>	<p><b>Informal:</b> Interactive Word Wall Questioning Journaling Observation of oral discourse</p> <p><b>Formal Assessment:</b> Vocabulary quizzes Oral Presentation</p>

Standards Alignment	Unit Concepts	Essential Questions	Assessments
<p>behavior or interaction in various settings such as school, family and the community in the target language cultures.</p> <p><b>3.1-</b>Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, mathematical terms and scientific information</p> <p><b>3.2-</b>Students use sources intended for same age speakers of the target language to prepare reports on topics of personal interest or those with which they have limited previous experience.</p> <p><b>4.1-</b>Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning.</p>	<p>Likes/dislikes (<i>gustar</i> + <i>infinitive</i>)</p> <p>Interrogative words</p> <p>Formal vs. informal you</p> <p>Personal pronouns and <i>ser</i></p> <p>Noun/adjective agreement and placement</p>		<p>Rubrics</p> <p>Self Assessment</p>
<p><b>Unit Three: En la escuela</b>  <b>Timeline: 5 weeks</b></p>			
<p><b>1.1-</b>Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.3-</b> Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media</p> <p><b>2.1-</b> Students observe, identify and discuss simple patterns of behavior or interaction in various settings such as school, family and the community in the target language cultures.</p> <p><b>2.2-</b>Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods.</p> <p><b>3.2-</b> Students use sources intended for same age speakers of the target language to prepare reports on topics of personal interest or those with which they have limited previous experience.</p>	<p>Students around the world share similar schooling experiences although differences exist due to geography, resources, and culture.</p> <p>Time and schedules</p> <p>Classes and descriptors</p> <p>Numbers 31-100</p> <p>Irregular verbs (<i>estar, tener, ir</i>)</p> <p>Present tense of regular –ar verbs.</p>	<p><b>Essential Questions:</b>  How can students describe their school experience?    How do schools compare from culture-to-culture?</p>	<p><b>Informal:</b>  Interactive Word Wall  Questioning  Journaling  Observation of oral discourse</p> <p><b>Formal Assessment:</b>  Vocabulary quizzes  Oral Presentation  Rubrics  Self Assessment</p>

Standards Alignment	Unit Concepts	Essential Questions	Assessments
<p>4.2-Students speculate on why certain products originate in and/or are important to particular cultures by analyzing selected products from the target cultures and their own.</p> <p>5.2-Students use various media from the language and culture for entertainment or personal pleasure</p>			
<p><b>Unit Four: La mesa de la familia</b>  <b>Timeline: 6 weeks</b></p>			
<p>1.1-Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p>1.3- Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media</p> <p>2.1- Students observe, identify and discuss simple patterns of behavior or interaction in various settings such as school, family and the community in the target language cultures.</p> <p>2.2- Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods.</p> <p>3.1- Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, mathematical terms and scientific information</p> <p>3.2- Students use sources intended for same age speakers of the target language to prepare reports on topics of personal interest or those with which they have limited previous experience.</p> <p>4.1- Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning.</p>	<p>Families share a sense of unity and tradition that often centers around mealtimes, cuisine, and celebrations</p> <p>Family</p> <p>Dates</p> <p>Numbers 200-1,000,000</p> <p>Possessive adjectives</p> <p>Food, restaurants, table etiquette</p> <p>-er/-ir verbs; <i>gustar</i>; stem-changing verbs</p> <p>.</p>	<p><b>Essential Questions:</b>  What is my definition of family?    What do I eat that is “American”?    What are some staple foods of target language countries?</p>	<p><b>Informal:</b>  Interactive Word Wall  Questioning  Journaling  Observation of oral discourse  Skit</p> <p><b>Formal Assessment:</b>  Vocabulary quizzes  Oral Presentation  Rubrics  Self Assessment  Skit</p>

Standards Alignment	Unit Concepts	Essential Questions	Assessments
5.1-Students identify ways that knowing languages are crucial to many professions.			
<b>Unit Five: Vamos de compras</b> <b>Timeline: 5 weeks</b>			
<p>1.1- Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p>1.2 Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p>1.3- Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media</p> <p>2.1- Students observe, identify and discuss simple patterns of behavior or interaction in various settings such as school, family and the community in the target language cultures.</p> <p>3.1-Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, mathematical terms and scientific information</p> <p>4.1- Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning.</p> <p>5.1- Students identify ways that knowing languages are crucial to many professions.</p>	<p>People choose clothing that reflect their personal identity as well as their cultural heritage.</p> <p>Clothing and shopping Vocabulary</p> <p>Getting around town</p> <p>Direct object pronouns</p>	<p><b>Essential Questions:</b>  What clothing do teenagers wear?   What cultural elements influence their choices?</p>	<p><b>Informal:</b>  Interactive Word Wall  Questioning  Journaling  Observation of oral discourse</p> <p><b>Formal Assessment:</b>  Vocabulary quizzes  Oral Presentation  Rubrics  Self Assessment</p>

Standards Alignment	Unit Concepts	Essential Questions	Assessments
<b>Unit Six: Bienvenido a nuestra casa (Model Unit-House and Home)</b> <b>Timeline: 5 weeks</b>			
<p><b>1.1-</b> Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.2</b> Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p><b>1.3-</b> Students write or tell about products or practices of their own culture or the target language cultures. They use language supported by visual cues such as posters, pictures, process. etc</p> <p><b>2.2-</b> Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods.</p> <p><b>3.2-</b> Students use sources intended for same age speakers of the target language to prepare reports on topics of personal interest or those with which they have limited previous experience.</p> <p><b>4.2-</b> Students speculate on why certain products originate in and/or are important to particular cultures by analyzing selected products from the target cultures and their own.</p> <p><b>5.2-</b> Students use various media from the language and culture for entertainment or personal pleasure</p>	<p>How people define a home differs according to culture, geography, and resources.</p> <p>Although houses share commonalities throughout the world, the notion of home is tied to one's culture and personal vision</p> <p>Vocabulary related to rooms in the house, furniture, chore</p> <p><i>ser vs. estar</i></p> <p><i>tu</i> affirmative commands</p> <p>Ordinal numbers</p>	<p><b>Essential Questions:</b>  How does my definition of home compare to that of other students' from other cultures?</p> <p>How does the definition of chore differ depending on culture?</p> <p>What is a home?</p> <p>How and where do I live?</p> <p>How and where do people live in the countries where the target language is spoken?</p> <p>What are my family's responsibilities and routines at home and how do they compare to those of the family in the target culture?</p>	<p><b>Informal:</b>  Interactive Word Wall  Questioning  Journaling  Observation of oral discourse</p> <p><b>Formal Assessment:</b>  Vocabulary quizzes  Oral Presentation  Rubrics  Self Assessment  Interpretive Tasks</p>
<b>Unit Seven: Mantener un cuerpo sano</b> <b>Timeline: 5 weeks</b>			
<p><b>1.1-</b> Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.3-</b> Students write or tell about products or practices of their own culture or the target language cultures. They use language</p>	<p>A person's perception of health depends on cultural values related to physical definitions and emotional mores</p>	<p><b>Essential Questions:</b>  How do I express myself and my feelings to others?</p> <p>How do I communicate my health or state of being to</p>	<p><b>Informal:</b>  Interactive Word Wall  Questioning  Journaling  Observation of oral discourse  Skit</p>

Standards Alignment	Unit Concepts	Essential Questions	Assessments
<p>supported by visual cues such as posters, pictures, process. etc</p> <p><b>2.2-</b> Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods.</p> <p><b>3.1-</b>Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, mathematical terms and scientific information</p> <p><b>3.2-</b> Students use sources intended for same age speakers of the target language to prepare reports on topics of personal interest or those with which they have limited previous experience.</p> <p><b>4.2-</b>Students speculate on why certain products originate in and/or are important to particular cultures by analyzing selected products from the target cultures and their own.</p> <p><b>5.2-</b>Students use various media from the language and culture for entertainment or personal pleasure</p>	<p>Vocabulary related to health and emotion</p> <p>Parts of the body</p> <p>Illnesses and remedies</p> <p><i>Estar</i></p> <p>Sports</p> <p><i>Jugar</i></p> <p><i>Ssaber vs. conocer</i></p> <p>Preterit of –ar verbs.</p> <p>.</p>	<p>others?</p> <p>How does my definition of what it means to be healthy compare to that of someone from the target language culture?</p>	<p><b><u>Formal Assessment:</u></b></p> <p>Vocabulary quizzes</p> <p>Oral Presentation</p> <p>Rubrics</p> <p>Self Assessment</p> <p>Skit</p>

# Curriculum Framework for Spanish

School: Newark Charter School

Curricular Tool: N/A

Course: Level 2

Standards Alignment	Unit Concepts	Essential Questions	Assessments
<p><b>Unit One: Mis amigos y yo (Model Unit-Student Life)</b>  <b>Timeline : 5 weeks</b></p>			
<p><b>1.1-</b> Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures.</p> <p><b>1.2-</b>Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>1.3-</b> Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p><b>2.2-</b>Students search for, identify and investigate the function of utilitarian products (e.g. , sports equipments, household items, tools, foods and clothing) of the culture studied as found within their homes and communities.</p> <p><b>3.2</b> Students read, listen to and talk about age appropriate school content, folk tales, short stories, internet sites, poems and songs written for native speakers of the target language.</p> <p><b>4.1-</b>Students demonstrate an awareness of ways of expressing respect and communicating status differences in their own language and the language they are learning.</p> <p><b>4.2-</b>Students hypothesize the relationship between the products and perspectives in the cultures studied and compare and contrast them with their own.</p>	<p>Although differences exist due to culture and geography, teenagers across the world share many commonalities in their relationships with friends.</p> <p>Vocabulary related to greetings, daily activities and hobbies, city destinations, personality, and state of being.</p> <p>Definite and indefinite articles</p> <p>Subject pronouns</p> <p>Adjective agreement</p> <p>Present tense of regular and stem-changing verbs as well as <i>ser, estar, ir, tener, and gustar.</i></p>	<p><b>Essential Questions:</b>            What is my high school experience?             What is high school like for students in other cultures?             How does your daily schedule compare with that of other teenagers from Spanish-speaking countries?             What do you like to do and how does that compare to students from other cultures?</p>	<p><b>Informal:</b>            Interactive Word Wall            Questioning            Journaling            Observation of oral discourse</p> <p><b>Formal Assessment:</b>            Vocabulary quizzes            Oral Presentation            Rubrics            Self Assessment            GRASP task</p>

Standards Alignment	Unit Concepts	Essential Questions	Assessments
<b>Unit Two: Vamos de viaje (Model Unit- Un viaje)</b> <b>Timeline: 5 weeks</b>			
<p><b>1.1-</b> Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures.</p> <p><b>1.2-</b>Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>1.3-</b> Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p><b>2.1-</b>Students demonstrate the importance of following cultural expectations while participating in cultural practices.</p> <p><b>3.1-</b>Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, health and physical fitness and the performing arts.</p> <p><b>3.2</b> Students read, listen to and talk about age appropriate school content, folk tales, short stories, internet sites, poems and songs written for native speakers of the target language.</p> <p><b>4.1-</b>Students demonstrate an awareness of ways of expressing respect and communicating status differences in their own language and the language they are learning.</p> <p><b>4.2-</b>Students hypothesize the relationship between the products and perspectives in the cultures studied and compare and contrast them with their own.</p> <p><b>5.1-</b>Students contact local agencies to secure information</p>	<p>The concept of travel connotes different meaning to people according to their needs, resources, and experiences</p> <p>Vocabulary related to airplane travel, lodging and vacation; giving and receiving directions</p> <p>Location prepositions</p> <p>direct and indirect object pronouns</p> <p>preterit of regular –ar verbs, <i>ir, ser, hacer, ver and dar.</i></p> <p>Costa Rican national parks and ecosystems.</p>	<p><b>Essential Questions:</b> How are my travel needs similar to and different from those from other cultures?</p> <p>What information do I need to know in order to plan a trip to a foreign country?</p> <p>What is my definition of a vacation and how does that differ from someone’s from another culture?</p>	<p><b>Informal:</b> Interactive Word Wall Questioning Journaling Observation of oral discourse</p> <p><b>Formal Assessment:</b> Vocabulary quizzes Oral Presentation Rubrics Self Assessment</p>

Standards Alignment	Unit Concepts	Essential Questions	Assessments
regarding products or practices of target-language cultures			
<b>Unit Three: Somos saludables</b> <b>Timeline: 7 weeks</b>			
<p><b>1.1-</b> Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures.</p> <p><b>1.2-</b>Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>1.3-</b> Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p><b>2.1-</b>Students demonstrate the importance of following cultural expectations while participating in cultural practices.</p> <p><b>2.2-</b>Students search for, identify and investigate the function of utilitarian products (e.g. , sports equipments, household items, tools, foods and clothing) of the culture studied as found within their homes and communities.</p> <p><b>3.1-</b>Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, health and physical fitness and the performing arts.</p> <p><b>3.2</b> Students read, listen to and talk about age appropriate school content, folk tales, short stories, internet sites, poems and songs written for native speakers of the target language.</p> <p><b>4.1-</b>Students demonstrate an awareness of ways of expressing respect and communicating status differences in their own</p>	<p>The definition of a nutritious, healthy lifestyle varies from culture to culture.</p> <p>Vocabulary related to sports, healthy habits, daily routine, body parts, and personal care items.</p> <p>Sequencing of events</p> <p>adverbs (<i>-mente</i>) reflexive verbs and pronouns</p> <p>present progressive</p> <p>demonstrative adjectives and pronouns</p> <p>plans with <i>pensar</i></p> <p>preterit of regular –er and –ir verbs</p>	<p><b><u>Essential Questions:</u></b></p> <p>What is your daily routine and how does that compare with that of a student from another culture?</p> <p>What is your definition of nutrition?</p> <p>How do you maintain your health?</p>	<p><b><u>Informal:</u></b></p> <p>Interactive Word Wall Questioning Journaling Observation of oral discourse</p> <p><b><u>Formal Assessment:</u></b></p> <p>Vocabulary quizzes Oral Presentation Rubrics Self Assessment</p>

Standards Alignment	Unit Concepts	Essential Questions	Assessments
<p>language and the language they are learning.</p> <p><b>4.2-</b>Students hypothesize the relationship between the products and perspectives in the cultures studied and compare and contrast them with their own.</p> <p><b>5.2-</b>Students consult various sources in the target language to obtain information on topics of personal interest. Students also establish communication with speakers of the target language.</p>			
<p><b>Unit Four: Al centro comercial</b>  <b>Timeline: 7 weeks</b></p>			
<p><b>1.1-</b> Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures.</p> <p><b>1.2-</b>Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>1.3-</b> Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p><b>2.2-</b>Students search for, identify and investigate the function of utilitarian products (e.g. , sports equipments, household items, tools, foods and clothing) of the culture studied as found within their homes and communities.</p> <p><b>3.1-</b>Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, health and physical fitness and the performing arts.</p>	<p>People shop out of necessity and for fun, whether it be for food, clothing or for gifts.</p> <p>Vocabulary related to clothing and fit, personal needs, stores, materials, crafts, and recommendations.</p> <p>Verbs: <i>gustar: encantar, interesar, importar, quedar</i></p> <p>Present tense irregular <i>yo</i> verbs</p> <p>Prepositions and pronouns</p> <p>Time expressions with <i>hace</i></p> <p>Irregular preterit verbs: <i>u</i> stems, <i>uv</i> stems, <i>i</i> stems</p> <p>Stem-changing –<i>ir</i> verbs in the preterit</p> <p>Converting money and exchange rates.</p> <p>Spanish-speaking countries in</p>	<p><b>Essential Questions:</b>  How do your clothes and style compare to that of someone from another culture?</p> <p>How is commerce different in Spanish-speaking countries?</p>	<p><b>Informal:</b>  Interactive Word Wall  Questioning  Journaling  Observation of oral discourse</p> <p><b>Formal Assessment:</b>  Vocabulary quizzes  Oral Presentation  Rubrics  Self Assessment</p>

Standards Alignment	Unit Concepts	Essential Questions	Assessments
<p>4.1-Students demonstrate an awareness of ways of expressing respect and communicating status differences in their own language and the language they are learning.</p> <p>4.2-Students hypothesize the relationship between the products and perspectives in the cultures studied and compare and contrast them with their own.</p>	<p>the Caribbean; art, handicrafts, and markets.</p>		
<p><b>Unit Five: A comer</b> <b>Timeline: 5 weeks</b></p>			
<p>1.1- Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures.</p> <p>1.2-Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p>1.3- Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p>2.1-Students demonstrate the importance of following cultural expectations while participating in cultural practices.</p> <p>2.2-Students search for, identify and investigate the function of utilitarian products (e.g. , sports equipments, household items, tools, foods and clothing) of the culture studied as found within their homes and communities.</p> <p>3.1-Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, health and physical fitness and the performing arts.</p>	<p>Food is symbolic to people of their cultural heritage and varies according to their socioeconomic status, geography, and tastes.</p> <p>Vocabulary related to food and food preparation, place settings, restaurant dishes and ordering</p> <p>Ud. and Uds. commands</p> <p>extremes (-isimo)</p> <p>affirmative and negative expressions</p>	<p><b>Essential Questions:</b> How do your favorite foods compare with those of someone from another culture?</p> <p>How do you order in a restaurant?</p> <p>How do you prepare foods from another culture?</p>	<p><b>Informal:</b> Interactive Word Wall Questioning Journaling Observation of oral discourse</p> <p><b>Formal Assessment:</b> Vocabulary quizzes Oral Presentation Rubrics Self Assessment</p>

Standards Alignment	Unit Concepts	Essential Questions	Assessments
<p>4.1-Students demonstrate an awareness of ways of expressing respect and communicating status differences in their own language and the language they are learning.</p> <p>4.2-Students hypothesize the relationship between the products and perspectives in the cultures studied and compare and contrast them with their own.</p>			
<p><b>Unit Six: El arte y las películas</b>  <b>Timeline: 5 weeks</b></p>			
<p>1.1- Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures.</p> <p>1.2-Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p>1.3- Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p>2.1-Students demonstrate the importance of following cultural expectations while participating in cultural practices.</p> <p>2.2-Students search for, identify and investigate the function of utilitarian products (e.g. , sports equipments, household items, tools, foods and clothing) of the culture studied as found within their homes and communities.</p> <p>3.1-Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, health and physical fitness and the performing arts.</p>	<p>Entertainment like film and cinema play a valuable role in leisure time, as well as in teaching about a people’s culture.</p> <p>Vocabulary related to movies and to movie making, technology</p> <p>negative <i>tu</i> commands</p> <p>making and accepting invitations</p> <p>irregular preterit</p> <p>imperfect</p> <p>preterit vs. imperfect</p> <p>past participles as adjectives</p>	<p><b>Essential Questions:</b>  What effects do Hispanics have on the film industry?</p> <p>How do you express your feelings about movies and technology?</p> <p>What do you learn from films?</p>	<p><b>Informal:</b>  Interactive Word Wall  Questioning  Journaling  Observation of oral discourse</p> <p><b>Formal Assessment:</b>  Compare film awards  Read and respond to an excerpt from <i>La casa de los espíritus</i>.  Vocabulary quizzes  Oral Presentation  Rubrics  Self Assessment</p>

Standards Alignment	Unit Concepts	Essential Questions	Assessments
<p><b>4.1</b>-Students demonstrate an awareness of ways of expressing respect and communicating status differences in their own language and the language they are learning.</p> <p><b>4.2</b>-Students hypothesize the relationship between the products and perspectives in the cultures studied and compare and contrast them with their own.</p>			

# Curriculum Framework for Chinese I

School: Newark Charter School

Curricular Tool: Integrated Chinese I – Cheng & Tsui Company

Grade: N/A

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<b>Unit: Introduction</b> <b>Timeline : 1 week</b>			
<p><b>1.1</b> Students introduce themselves and their classmates, name, objects, places and actions and respond to commands and question. Student also express basic likes and dislikes.</p> <p><b>1.3</b> - Students write or tell about products or practices of their own culture or the target-language cultures. They use language supported by visual cues such as posters, pictures, props, etc.</p> <p><b>2.1</b> - Students observe, identify and discuss simple patterns of behavior or interaction in various settings such as school, family and the community in the target-language cultures.</p>	<p>Chinese Language and Dialects</p> <p>Syllabic Structure and Pronunciation of Modern Standard Chinese</p> <p>The Chinese Writing System</p> <p>Useful Expressions</p>	<p>Students will use common expressions in the classroom and daily life.</p>	<p><b>Informal:</b> Observation of student strokes.</p> <p>Participation in oral discussion, correctly using and/or answering classroom and survival expressions.</p> <p>Observation of student use of Chinese Input Tool.</p>
<b>Unit One: Greetings</b> <b>Timeline: 1 week</b>			
<p><b>1.1</b> - Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes</p> <p><b>2.1</b> - Students observe, identify and discuss simple patterns of behavior or interaction in various settings such as school, family and the community in the target-language cultures.</p>	<p>Exchange Greetings</p> <p>Asking about Someone’s Nationality</p> <p><b>Forms and Accuracy</b></p> <ol style="list-style-type: none"> <li>1. The Verb 姓 (xìng)</li> <li>2. Questions Ending with 呢 (ne)</li> <li>3. The Verb 叫 (jiào)</li> <li>4. The Verb 是 (shì)</li> <li>5. Questions Ending with (ma)</li> <li>6. The Negative Adverb</li> </ol>	<p>Students will exchange basic greetings.</p> <p>Students will request a person’s last name and full name.</p> <p>Students will determine whether someone is a teacher or a student.</p> <p>Students will ascertain someone’s</p>	<p><b>Informal:</b> Teacher observation of dialogue and use of greetings.</p> <p>Teacher observation of student dialogues inquiring about demographic information of classmates.</p> <p>Teacher observations of student pronunciation of initials, tones, tone combinations, and syllables in neutral tones.</p> <p>Formative assessment checks of students identifying telling information about someone from a business card.</p>

	不 (bù) 7. The Adverb 也 (yě)  <u><b>Culture Highlights:</b></u> Chinese Names	nationality.	Observation of student use of Chinese Input Tool.  Interactive Word Wall  Questioning  Journal  <u><b>Formal Assessment:</b></u> Chinese-English, English-Chinese matching of phrases and translations.  Vocabulary quiz
<b>Unit Two: Family</b> <b>Timeline: 2 weeks</b>			
<p><b>1.1-</b>Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.2 -</b> Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p><b>1.3 -</b> Students write or tell about products or practices of their own culture or the target-language cultures. They use language supported by visual cues such as posters, pictures, props, etc.</p> <p><b>2.1 -</b> Students observe, identify and discuss simple patterns of behavior or interaction in various settings such as school, family and the community in the target-language cultures.</p> <p><b>2.2 -</b> Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods.</p>	Looking at a Family Photo  Asking about Someone’s Family  <u><b>Forms and Accuracy</b></u>  1. The Particle 的 (de) (I) 2. Measure Words (I) 3. Question Pronouns 4. 有 (yǒu) in the sense of "to Have" or "to Possess" 5. 有 (yǒu) in the sense of “to Exist” 6. The Usage of 二 (èr) and (liǎng) 7. The Adverb 都 (dōu) <u><b>Culture Highlights:</b></u> Chinese kinship terms	Students will employ basic kinship terms.  Students will describe a family photo.  Students will ask about someone’s profession.  Students will say some common professions.	<u><b>Informal:</b></u> Teacher observation of dialogue and use of family vocabulary.  Teacher observation of student dialogues inquiring about demographic information of classmates families.  Teacher observations of student pronunciation of initials, tones, tone combinations, and syllables in neutral tones.  Formative assessment checks of student dialogue about someone’s family from a photo.  Observation of student use of Chinese Input Tool.  Interactive Word Wall  Questioning

	Chinese education system		Journal  <b>Formal Assessment:</b> Chinese-English, English-Chinese matching of phrases and translations.  Vocabulary quiz
<b>Unit Three: Dates &amp; Time</b> <b>Timeline: 2 weeks</b>			
<p><b>1.1-</b> Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.2 -</b> Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p><b>1.3-</b> Students write or tell about products or practices of their own culture or the target-language cultures. They use language supported by visual cues such as posters, pictures, props, etc.</p> <p><b>4.1-</b> Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning.</p>	<p>Taking Someone out to Eat on His/Her Birthday.</p> <p>Inviting Someone to Dinner</p> <p><b>Forms and Accuracy</b></p> <ol style="list-style-type: none"> <li>1. Numbers (0, 1–100)</li> <li>2. Dates and Time</li> <li>3. Pronouns as Modifiers and the Usage of the Particle 的 (de) (II)</li> <li>4. The Sentence Structure of 我你吃 (Wǒ qǐng nǐ chī fàn)</li> <li>5. Alternative Questions</li> <li>6. Affirmative + Negative (A-not-A) Questions (I)</li> <li>7. The Adverb 还 (hái)</li> </ol> <p><b>Culture Highlights:</b> Chinese calendar</p> <p>Chinese manner of</p>	<p>Students will tell and speak about time and dates.</p> <p>Students will talk about someone's age and birthday.</p> <p>Students will invite someone to dinner.</p> <p>Students will arrange a dinner date.</p>	<p><b>Informal:</b> Teacher observation of dialogue and use of date and time vocabulary.</p> <p>Teacher observation of student dialogues inquiring about birthdays, times and invitations.</p> <p>Teacher observations of students asking and answering when birthdays are and forming a birthday dragon, with earlier birthdays in the front, later birthdays in the back. Teacher will ask first student when his or her birthday is, the student will answer in Chinese, then turn and ask the question to the second person in line. This will go on until all students have asked and answered when the question about birthdays.</p> <p>Formative assessment checks of student dialogue about inviting someone to dinner with specific days and times.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p>

	<p>counting age</p> <p>Chinese food symbolizing longevity.</p>		<p>Journal</p> <p><b>Formal Assessment:</b> Chinese-English, English-Chinese matching of phrases and translations</p> <p>Writing rubric: character forms</p> <p>Vocabulary quiz</p> <p>Skit</p> <p>Rubric</p>
<p><b>Unit Four: Hobbies</b> <b>Timeline: 2-3 weeks</b></p>			
<p><b>1.1-</b> Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.2 -</b> Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p><b>1.3 -</b> Students write or tell about products or practices of their own culture or the target-language cultures. They use language supported by visual cues such as posters, pictures, props, etc.</p> <p><b>2.2 -</b> Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods.</p> <p><b>4.1 -</b> Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning.</p> <p><b>5.1-</b> Students identify ways that knowing languages are</p>	<p>Talking about Hobbies.</p> <p>Word order in Chinese (grammar)</p> <p><b>Forms and Accuracy</b></p> <ol style="list-style-type: none"> <li>1. Word Order in Chinese</li> <li>2. Affirmative + Negative (A-not-A) Questions (II)</li> <li>3. The Conjunction 那 (么) (nà{me})</li> <li>4. 去 (qù) + Action</li> <li>5. Questions with 好 (hǎo ma)</li> <li>6. The Modal Verb 想 (xiǎng)</li> <li>7. Verb+Object as a Detachable Compound</li> </ol> <p><b>Culture Highlights:</b> Chinese way of “splitting” the check</p>	<p>Students will say and write the terms for basic personal hobbies.</p> <p>Students will ask about someone’s hobbies. Students will ask friends out to see a movie.</p> <p>Students will set up plans for the weekend.</p>	<p><b>Informal:</b> Teacher observation of dialogue and use proper form of sentences.</p> <p>Teacher observation of student dialogues inquiring about favorite hobbies.</p> <p>Formative assessment checks of students’ dialogue about hobbies, answering in the affirmative and negative, and identifying either/or scenarios.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b> Chinese-English, English-Chinese matching of phrases and translations.</p>

<p>crucial to many professions.</p>	<p>Chinese pastimes</p>		<p>Students will create a week's schedule of activities/hobbies.</p> <p>Rubric</p> <p>Self Assessment</p> <p>Vocabulary quiz</p>
<p><b>Unit Five: Visiting Friends</b> <b>Timeline: 3 weeks</b></p>			
<p><b>1.1-</b> Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.2-</b> Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p><b>1.3-</b> Students write or tell about products or practices of their own culture or the target-language cultures. They use language supported by visual cues such as posters, pictures, props, etc.</p> <p><b>2.1-</b> Students observe, identify and discuss simple patterns of behavior or interaction in various settings such as school, family and the community in the target-language cultures.</p> <p><b>4.1-</b> Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning.</p> <p><b>5.2-</b> Students use various media from the language and culture for entertainment or personal pleasure.</p>	<p>Visiting a Friend's Home</p> <p>At a Friend's House</p> <p><b>Forms and Accuracy</b></p> <p>1. 一下 (yí xià) and (一) 儿 ({yì} diǎnr)</p> <p>Moderating the Tone of Voice</p> <p>2. Adjectives as Predicates</p> <p>3. The Preposition 在 (zài)</p> <p>4. The Particle 吧 (ba)</p> <p>5. The Particle 了 (le) (l)</p> <p>6. The Adverb 才 (cái)</p> <p><b>Culture Highlights:</b> Chinese civilities upon meeting for the first time.</p> <p>Chinese tea.</p>	<p>Students will welcome a visitor.</p> <p>Students will introduce one person to another.</p> <p>Students will compliment someone on his/her house.</p> <p>Students will ask for beverages as a guest at someone else's place.</p> <p>Students will offer beverages to a visitor.</p> <p>Students will briefly describe a visit to a friend's place.</p>	<p><b>Informal Assessment:</b> Teacher observation of dialogue and use proper form of sentences. Teacher observation of students' dialogue about visiting friends, introducing people to one another, and answering in the affirmative or negative.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b> Chinese-English, English-Chinese matching of phrases and translations.</p> <p>Students will write a mock dialogue containing at least two characters. One will be the visitor and other(s) will be home owners. Dialogue will include a welcome statement, offering a beverage, a response in the affirmative or negative, and commentary on the visit.</p>

			Rubrics Vocabulary quiz
<b>Review: That's How the Chinese Say It!</b> <b>Timeline: 1-2 days</b>			
<p><b>1.1-</b> Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.2-</b> Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p><b>4.1-</b> Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning.</p>	<p><b>Forms and Accuracy</b></p> <ol style="list-style-type: none"> <li>算了 (suàn le)</li> <li>谁呀 (shéi ya)</li> <li>是 (shì ma)</li> </ol>	Students will review the functional expressions from lessons 1-5.	<p><b>Informal:</b></p> <p>Observation of student use of Chinese Input Tool.</p> <p>Teacher observation of in class dialogue and use of unit vocabulary.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b>Formal:</b></p> <p>Unit Test</p>
<b>Unit Six: Making Appointments</b> <b>Timeline: 1 week</b>			
<p><b>1.1-</b> Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.2 -</b>Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p><b>2.1-</b> Students observe, identify and discuss simple patters of behavior or interaction in various settings such as school, family and the community in the target-language cultures.</p>	<p>Phone calls</p> <p><b>Forms and Accuracy</b></p> <ol style="list-style-type: none"> <li>The Preposition (gěi)</li> <li>The Modal Verb 要 (yào) (I)</li> <li>The Adverb (bié)</li> <li>Time Expressions</li> <li>The Modal Verb 得 (děi)</li> <li>Directional Complements (I)</li> </ol>	<p>Students will answer a phone call and initiate a phone conversation.</p> <p>Students will set up an appointment with a teacher on the phone.</p> <p>Students will ask for a favor</p> <p>Students will ask someone to return</p>	<p><b>Informal:</b></p> <p>Teacher observation of dialogue and use proper form of sentences.</p> <p>Teacher observation of student mock phone calls.</p> <p>Formative assessment checks of students' dialogue about hobbies, answering in the affirmative and negative, and identifying either/or scenarios.</p> <p>Observation of student use of Chinese Input Tool.</p>

<p><b>4.1-</b> Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning.</p> <p><b>5.1-</b> Students identify ways that knowing languages are crucial to many professions.</p>	<p><b>Culture Highlights:</b> Chinese phone etiquette.</p> <p>Chinese phone numbers.</p> <p>Chinese names for the Chinese language.</p>	<p>their call.</p>	<p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b> Chinese-English, English-Chinese matching of phrases and translations.</p> <p>Students will create a Chinese “phone book” properly alphabetizing Chinese names and forming Chinese phone numbers.</p> <p>Vocabulary quiz</p>
<p><b>Unit Seven: Studying Chinese</b> <b>Timeline: 2 weeks</b></p>			
<p><b>1.2-</b>Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p><b>1.3-</b> Students write or tell about products or practices of their own culture or the target-language cultures. They use language supported by visual cues such as posters, pictures, props, etc.</p> <p><b>2.1 -</b>Students observe, identify and discuss simple patterns of behavior or interaction in various settings such as school, family and the community in the target-language cultures.</p> <p><b>3.1-</b>Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, mathematical terms and scientific information.</p> <p><b>3.2-</b>Students use sources intended for same-age speakers of the target language to prepare reports on topics of personal</p>	<p>How Did You Do on the Exam?</p> <p>Preparing for a Chinese Class</p> <p><b>Forms and Accuracy</b></p> <ol style="list-style-type: none"> <li>1. Descriptive Complements (I)</li> <li>2. The Adverbs 太 (tài) and 真 (zhēn)</li> <li>3. The Adverb 就 (jiù) (I)</li> <li>4. Double Objects</li> <li>5. Ordinal Numbers</li> <li>6. 有(一)儿 (yǒu {yì} diǎnr)</li> <li>7. 怎么 (zěnmě) in Questions</li> <li>8. The 的 (de) Structure</li> </ol>	<p>Students will comment on one’s performance on an exam.</p> <p>Students will comment on one’s character writing.</p> <p>Students will talk about one’s experience in learning Chinese vocabulary and grammar.</p> <p>Students will talk about one’s study habits.</p> <p>Students will remark on typical scenes</p>	<p><b>Informal:</b> Teacher observation of dialogue and use proper form of sentences.</p> <p>Teacher observation of student dialogues inquiring about language class experiences.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b> Chinese-English, English-Chinese matching of phrases and translations.</p> <p>Self Assessments on character writing.</p>

<p>interest, or those with which they have limited previous experience</p> <p><b>4.1-</b>Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning.</p>	<p>(I) 9. The Use of Nouns and Pronouns in Continuous Discourse</p> <p><b><u>Culture Highlights:</u></b> Chinese characters</p> <p>Chinese character writing.</p> <p>Chinese writing brushes and other stationery.</p>	<p>from one’s language class.</p>	<p>Peer assessments of character writing.</p> <p>Vocabulary quiz</p>
<p><b>Unit Eight: School Life</b> <b>Timeline: 2-3 weeks</b></p>			
<p><b>1.2-</b> Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p><b>1.3-</b>Students write or tell about products or practices of their own culture or the target-language cultures. They use language supported by visual cues such as posters, pictures, props, etc.</p> <p><b>2.1-</b> Students observe, identify and discuss simple patterns of behavior or interaction in various settings such as school, family and the community in the target-language cultures.</p> <p><b>2.2-</b> Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods.</p> <p><b>4.1-</b> Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning.</p> <p><b>4.2-</b>Students speculate on why certain products originate in</p>	<p>A Diary: A Typical School Day</p> <p>A Letter: Talking about Studying Chinese</p> <p><b><u>Forms and Accuracy</u></b></p> <p>1. The Position of Time-When Expressions</p> <p>2. The Adverb 就 (jiù)</p> <p>(II)</p> <p>3. 一...一 ... (yibiān...yibiān...)</p> <p>4. Series of Verbs/Verb Phrases</p> <p>5. The Particle 了 (le)</p> <p>(II)</p> <p>6. The Particle 的 (de)</p> <p>(III): To “de” or not to “de”</p> <p>7. The Adverb 正在 (zhèngzài)</p>	<p>Students will describe the routine of a student’s life on campus.</p> <p>Students will write a simple diary entry.</p> <p>Students will write a brief letter in the proper format.</p> <p>Students will express modesty in terms of foreign language ability.</p> <p>Students will invite friends to go on an outing.</p>	<p><b><u>Informal:</u></b> Teacher observation of dialogue and use proper form of sentences.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b><u>Formal Assessment:</u></b> Chinese-English, English-Chinese matching of phrases and translations.</p> <p>Self Assessment</p> <p>Peer Assessment</p> <p>Writing rubric for diary entry.</p> <p>Writing rubric for letter writing.</p>

<p>and/or are important to particular cultures by analyzing selected products from the target cultures and their own.</p>	<p>8. 除了...以外, ...(chúle...yǐwài, hái...) 9. 能 (néng) and (hui) (I) Compared 10. The Adverb 就 (jiù) (III)</p> <p><b>Culture Highlights:</b> Chinese letter format</p> <p>Chinese school year</p>		<p>Vocabulary quiz</p>
<p><b>Unit Nine: Shopping</b> <b>Timeline: 2-3 weeks</b></p>			
<p><b>1.3-</b>Students write or tell about products or practices of their own culture or the target-language cultures. They use language supported by visual cues such as posters, pictures, props, etc</p> <p><b>2.1-</b>Students observe, identify and discuss simple patters of behavior or interaction in various settings such as school, family and the community in the target-language cultures.</p> <p><b>2.2-</b>Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods.</p> <p><b>3.1-</b>Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, mathematical terms and scientific information.</p> <p><b>3.2-</b>Students use sources intended for same-age speakers of the target language to prepare reports on topics of personal interest, or those with which they have limited previous experience.</p> <p><b>4.1-</b>Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning.</p>	<p>Shopping for Clothes</p> <p>Exchanging Shoes</p> <p><b>Forms and Accuracy</b></p> <p>1. The Modal Verb 要 (yào) (II) 2. Measure Words (II) 3. The 的 (de) structure (II) 4. 多 (duō) Used Interrogatively 5. Amounts of Money 6. 跟/和...(不)一 (gēn/hé... {bù} yíyàng) 7. 虽然..., 可是/但是...(suīrán..., kěshì/dànshì...)</p> <p><b>Culture Highlights:</b> Chinese salesclerks and waiters</p> <p>Chinese formal attire</p>	<p>Students will speak about the color, size and price of the purchase.</p> <p>Students will recognize Chinese currency.</p> <p>Students will pay bills in cash or with a credit card.</p> <p>Students will determine the proper change you should receive.</p> <p>Students will ask for a different size and/or color of merchandise.</p> <p>Students will exchange merchandise.</p>	<p><b>Informal:</b> Teacher observation of dialogue and use proper form of sentences.</p> <p>Teacher observation of student dialogues inquiring about shopping.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b> Chinese-English, English-Chinese matching of phrases and translations.</p> <p>Students will create a shopping list and identify money needed for purchases based on online research of Chinese boutiques.</p> <p>Vocabulary quiz</p>

<p>4.2-Students speculate on why certain products originate in and/or are important to particular cultures by analyzing selected products from the target cultures and their own.</p>			<p>Skit Rubrics</p>
<p><b>Unit Ten: Transportation</b> <b>Timeline: 2-3 weeks</b></p>			
<p>1.2-Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p>2.1-Students observe, identify and discuss simple patterns of behavior or interaction in various settings such as school, family and the community in the target-language cultures.</p> <p>2.2-Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods.</p> <p>3.1- Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, mathematical terms and scientific information.</p> <p>4.1-Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning</p> <p>4.2-Students speculate on why certain products originate in and/or are important to particular cultures by analyzing selected products from the target cultures and their own.</p>	<p>Going Home for the Winter Vacation</p> <p>An Email: Thanking Someone for a Ride</p> <p><b>Forms and Accuracy</b></p> <ol style="list-style-type: none"> <li>1. Topic-Comment Sentences</li> <li>2. 或者 (huòzhě) and 是 (háishi)</li> <li>3. 先 (xiān)...再 (zài)...</li> <li>4. 是 (háishi)...(吧) (ba)</li> <li>5. 每 (měi)...都 (dōu)</li> <li>6. 要 (yào)...了 (le)</li> </ol> <p><b>Culture Highlights:</b> Chinese taxi drivers</p> <p>Chinese public transportation</p> <p>Chinese New Year</p>	<p>Students will comment about several means of transportation.</p> <p>Students will explain how to travel from one station to another.</p> <p>Students will describe a traffic route.</p> <p>Students will express their gratitude after receiving a personal favor.</p> <p>Students will offer New Year's wishes.</p>	<p><b>Informal:</b> Teacher observation of dialogue and use proper form of sentences.</p> <p>Teacher observation of student dialogues regarding modes of transportation.</p> <p>Observation of student use of Chinese Input Tool. Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b> Chinese-English, English-Chinese matching of phrases and translations.</p> <p>Vocabulary quiz</p> <p>E-mail thanking someone for a ride.</p> <p>Rubric</p>
<p><b>Review: That's How the Chinese Do It!</b> <b>Timeline: 2 days</b></p>			
<p>1.1-Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p>1.2-Students comprehend brief, written messages and short</p>	<p>Functional expressions, Lessons 6-10</p>	<p>Students will accurately form sentences.</p> <p>Students will</p>	<p><b>Informal:</b> Observation of student use of Chinese Input Tool.</p> <p>Teacher observation of in class dialogue using</p>

<p>personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p><b>4.1-</b>Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning.</p>		<p>accurately form all characters of written words and sentences.</p>	<p>unit vocabulary and proper sentence formation.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b><u>Formal Assessment:</u></b> Unit Test</p>
<p><b>Unit Eleven: Talking about the Weather</b> <b>Timeline: 2 weeks</b></p>			
<p><b>1.1-</b>Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.2-</b>Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p><b>1.3-</b>Students write or tell about products or practices of their own culture or the target-language cultures. They use language supported by visual cues such as posters, pictures, props, etc.</p> <p><b>2.1-</b>Students observe, identify and discuss simple patterns of behavior or interaction in various settings such as school, family and the community in the target-language cultures.</p> <p><b>2.2-</b>Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods.</p>	<p>Weather</p> <p><b><u>Forms and Accuracy</u></b></p> <p>1. Comparative Sentences with 比 (bǐ) (I)</p> <p>2. The Particle 了 (le) (III)</p> <p>3. The Modal Verb (huì, will) (II)</p> <p>4. Adj+(一) 儿 ({yì} diǎnr)</p> <p>5. The Adverb 又 (yòu, again)</p> <p>6. Adj/ V + 是 (shì) + Adj / V, + 可是/但是... (kěshì/dànshì...)</p> <p><b><u>Culture Highlights:</u></b> Temperature scale in China</p> <p>Climate conditions in China</p>	<p>Students will employ basic terms for weather patterns and phenomena.</p> <p>Students will describe simple weather changes.</p> <p>Students will compare the weather of two places.</p> <p>Students will talk about what you may do in nice or bad weather.</p> <p>Students will present a simple weather forecast.</p>	<p><b><u>Informal:</u></b> Teacher observation of dialogue and use proper form of sentences.</p> <p>Teacher observation of student dialogues talking about the weather. Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b><u>Formal Assessment:</u></b> Chinese-English, English-Chinese matching of phrases and translations.</p> <p>Students will create a weekly weather forecast for their city and a city in China. They will present their forecast to a group of non-Chinese speakers. They will offer interpretive visuals to aid in the understanding of the forecast.</p>

	Western place names in Chinese  Internet bars in China		Presentation rubric  Self Assessment  Peer Assessment  Vocabulary quiz
<b>Unit Twelve: Dining</b> <b>Timeline: 2 weeks</b>			
<p><b>1.1</b>-Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.3</b>-Students write or tell about products or practices of their own culture or the target-language cultures. They use language supported by visual cues such as posters, pictures, props, etc.</p> <p><b>2.1</b>-Students observe, identify and discuss simple patterns of behavior or interaction in various settings such as school, family and the community in the target-language cultures.</p> <p><b>2.2</b>-Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods.</p> <p><b>4.2</b>-Students speculate on why certain products originate in and/or are important to particular cultures by analyzing selected products from the target cultures and their own.</p>	<p>Dining Out</p> <p>Eating in a Cafeteria</p> <p><b>Forms and Accuracy</b></p> <p>1. 一 ...也/都...不/没... (yì...yě/dōu...bù/méi)</p> <p>2. Adverb 多/少 (duō/shǎo) + V</p> <p>3. (gāng) vs 才 (gāngcái)</p> <p>4. Resultative Complements (I)</p> <p>5. 好 (hǎo) as a Resultative Complement</p> <p>6. Reduplication of Adjectives</p> <p>7. The Verb (lái)</p> <p><b>Culture Highlights:</b> Principal cuisines in China.</p> <p>Staple foods on the Chinese menu. Food culture in China.</p>	<p>Students will ask if there are seats available in a restaurant.</p> <p>Students will order Chinese dishes.</p> <p>Students will tell the waiter their dietary preferences and restrictions.</p> <p>Students will ask the restaurant to recommend dishes.</p> <p>Students will rush their order.</p> <p>Students will pay for their meal.</p> <p>Students will get the correct change after their payment.</p>	<p><b>Informal:</b> Teacher observation of dialogue and use proper form of sentences. .</p> <p>Formative assessment checks of students' dialogue about dining out experiences.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b> Chinese-English, English-Chinese matching of phrases and translations.</p> <p>Students will act out a scene from a restaurant. Groups will write dialogue with proper character and sentence formation and come together in a skit to act it out. Skit must include dialogue around all learning targets.</p> <p>Vocabulary quiz</p> <p>Rubrics</p>

	Western fast food in China.		
<b>Unit Thirteen: Asking Directions</b> <b>Timeline: 2 weeks</b>			
<p><b>1.1-</b>Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.2-</b>Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p><b>1.3-</b>Students write or tell about products or practices of their own culture or the target-language cultures. They use language supported by visual cues such as posters, pictures, props, etc.</p> <p><b>3.1-</b>Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, mathematical terms and scientific information.</p> <p><b>4.2-</b>Students speculate on why certain products originate in and/or are important to particular cultures by analyzing selected products from the target cultures and their own.</p>	<p>Travel</p> <p>Going to Chinatown</p> <p><b>Forms and Accuracy</b></p> <ol style="list-style-type: none"> <li>1. Direction and Location Words</li> <li>2. Comparative Sentences with (有) (méi{yǒu})</li> <li>3. 那 (nà) Indicating Degree</li> <li>4. 到 (dào) + Place + 去 (qù) + Action</li> <li>5. The Dynamic Particle (guo)</li> <li>6. Reduplication of Verbs</li> <li>7. Resultative Complements (II)</li> <li>8. 一...就... (yī...jiù..., as soon as...then...)</li> </ol> <p>Greetings in Chinese</p> <p>Traffic lights in China</p> <p>Terms for spoken and written Chinese</p> <p><b>Culture Highlights:</b></p> <p>Greetings in Chinese.</p> <p>Traffic lights in China</p> <p>Terms for spoken and written Chinese</p>	<p>Students will ask for and give directions.</p> <p>Students will identify locations by using landmarks as references.</p> <p>Students will describe whether two places are close to or far away from one another.</p> <p>Students will state where they are heading and the purpose of going there.</p>	<p><b>Informal:</b></p> <p>Teacher observation of dialogue and use proper form of sentences.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b></p> <p>Chinese-English, English-Chinese matching of phrases and translations.</p> <p>Students will create a one page travel pamphlet on traveling to China that includes phrases and/or images that speak to the learning targets.</p> <p>Self assessments</p> <p>Peer assessments</p> <p>Vocabulary quiz</p>

<b>Unit Fourteen: Birthday Party</b> <b>Timeline: 2 weeks</b>			
<p><b>1.1-</b>Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.2-</b>Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p><b>1.3-</b>Students write or tell about products or practices of their own culture or the target-language cultures. They use language supported by visual cues such as posters, pictures, props, etc.</p> <p><b>3.1-</b>Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, mathematical terms and scientific information.</p> <p><b>4.2-</b>Students speculate on why certain products originate in and/or are important to particular cultures by analyzing selected products from the target cultures and their own.</p> <p><b>5.2-</b>Students use various media from the language and culture for entertainment or personal pleasure.</p>	<p>Parties and Celebrations</p> <p><b>Forms and Accuracy</b></p> <ol style="list-style-type: none"> <li>1. 呢 (ne) Indicating an Action in Progress</li> <li>2. Verbal Phrases and Subject-Predicate Phrases Used as Attributives</li> <li>3. Time Duration</li> <li>4. Sentences with 是...的 (shì...de)</li> <li>5. (hái, still)</li> <li>6. 又...又... (yòu...yòu..., both...and...)</li> </ol> <p><b>Culture Highlights:</b> Dinner parties in China</p> <p>Singing karaoke in China</p> <p>Gift giving in China</p> <p>Chinese zodiac signs</p>	<p>Students will ask a friend to go to a party with you.</p> <p>Students will suggest things to take to a get-together.</p> <p>Students will offer someone a ride and arrange a time and place to meet.</p> <p>Students will thank people for their gifts.</p> <p>Students will describe a duration of time.</p> <p>Students will talk about the year of their birth and about their Chinese zodiac sign.</p> <p>Students will give a simple description of someone’s facial features.</p>	<p><b>Informal:</b> Teacher observation of dialogue and use proper form of sentences.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b> Chinese-English, English-Chinese matching of phrases and translations.</p> <p>Students are to create a party invitation using properly formed characters and sentence, date and time structure.</p> <p>Vocabulary quiz</p> <p>Skit</p> <p>Rubrics</p>
<b>Unit Fifteen: Seeing a Doctor</b> <b>Timeline: 2 weeks</b>			

<p><b>1.2-</b>Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p><b>1.3-</b>Students write or tell about products or practices of their own culture or the target-language cultures. They use language supported by visual cues such as posters, pictures, props, etc.</p> <p><b>2.2-</b>Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods.</p> <p><b>3.1-</b>Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, mathematical terms and scientific information.</p> <p><b>4.2-</b>Students speculate on why certain products originate in and/or are important to particular cultures by analyzing selected products from the target cultures and their own.</p>	<p>Health</p> <p>Allergies</p> <p><b><u>Forms and Accuracy</u></b></p> <ol style="list-style-type: none"> <li>1. 死 (sǐ) Indicating an Extreme Degree</li> <li>2. Times of Actions</li> <li>3. (qǐ lái) indicating the Beginning of an Action</li> <li>4. 把 (bǎ) Construction (I)</li> <li>5. The Preposition (duì)</li> <li>6. 越越... (yuè lái yuè...)</li> <li>7. 再 (zài) (shuō)</li> </ol> <p><b><u>Culture Highlights:</u></b></p> <p>Medicine in China</p> <p>Outpatient visits in China</p> <p>Medical insurance in China</p>	<p>Students will talk about basic symptoms of a cold.</p> <p>Students will describe common symptoms of allergies.</p> <p>Students will understand and repeat instructions on when and how often to take medications.</p> <p>Students will talk about why they do or don't want to see the doctor.</p> <p>Students will urge others to see a doctor when they are not feeling well.</p>	<p><b><u>Informal:</u></b></p> <p>Teacher observation of dialogue and use proper form of sentences.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b><u>Formal Assessment:</u></b></p> <p>Chinese-English, English-Chinese matching of phrases and translations.</p> <p>Vocabulary quiz</p> <p>Journal Entry</p> <p>Vocabulary quiz</p>
<p><b>Review: That's How the Chinese Say It!</b> <b>Timeline: 2 days</b></p>			
<p><b>1.1-</b>Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.2-</b>Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p><b>4.1-</b>Students realize that cognates enhance comprehension of spoken and written language and demonstrate that</p>	<p><b><u>Forms and Accuracy</u></b></p> <ol style="list-style-type: none"> <li>1. (zài, to exist)</li> <li>2. Complimentary Expressions</li> <li>3. 怎么了 (Zěnmé le? What's the matter? What's wrong?)</li> <li>4. 糟糕 (zāogāo, [It's] awful/What a mess)</li> </ol>	<p>Students will review functional expressions from Lessons 11-15</p>	<p><b><u>Informal:</u></b></p> <p>Observation of student use of Chinese Input Tool.</p> <p>Teacher observation of in class dialogue, use of unit vocabulary and proper sentence structure.</p> <p><b><u>Formal Assessment:</u></b></p> <p>Unit test</p>

awareness by identifying commonly occurring cognates in the language they are learning.			
<b>Unit Sixteen: Dating</b> <b>Timeline: 1-2 weeks</b>			
<p><b>1.1</b> -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.2</b> -Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics</p> <p><b>2.1</b>-Students observe, identify and discuss simple patterns of behavior or interaction in various settings such as school, family and the community in the target-language cultures.</p> <p><b>4.1</b>-Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning.</p> <p><b>5.2</b>-Students use various media from the language and culture for entertainment or personal pleasure.</p>	<p>Seeing A Movie</p> <p>Turning Down an Invitation</p> <p><b>Forms and Accuracy</b></p> <ol style="list-style-type: none"> <li>1. Descriptive Complements (II)</li> <li>2. Potential Complements</li> <li>3. 就 (jiù)</li> <li>4. Directional Complements (II)</li> </ol> <p><b>Culture Highlights:</b></p> <p>Dating in China</p> <p>Valentine’s Day in China</p> <p>Turning down a date the Chinese way</p> <p>Nightlife in China</p>	<p>Students will describe how long they’ve know someone.</p> <p>Students will invite someone to go on a date.</p> <p>Students will make the necessary arrangements to go out with friends.</p> <p>Students will accept a date courteously. Students will decline a date politely.</p> <p>Students will end a phone conversation without hurting the other person’s feelings.</p>	<p><b>Informal:</b></p> <p>Observation of student use of Chinese Input Tool.</p> <p>Teacher observation of in class dialogue, use of unit vocabulary and proper sentence structure.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b></p> <p>Vocabulary quiz</p> <p>Skit</p> <p>Presentation rubric</p> <p>Self assessment</p>
<b>Unit Seventeen: Renting an Apartment</b> <b>Timeline : 2 weeks</b>			
<p><b>1.1</b> -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.2</b> -Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas</p>	<p>Renting an Apartment</p> <p><b>Forms and Accuracy</b></p> <ol style="list-style-type: none"> <li>1. Verb + 了 (le) + Numeral + Measure Word + Noun + 了 (le)</li> <li>2. …都/也</li> </ol>	<p><b>Learning Targets</b></p> <p>Students will describe their current and ideal living quarters.</p> <p>Students will name</p>	<p><b>Informal:</b></p> <p>Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p>

<p>in oral narratives such as personal anecdote and narratives based on familiar topics</p> <p><b>3.2-</b>Students use sources intended for same-age speakers of the target language to prepare reports on topics of personal interest, or those with which they have limited previous experience.</p> <p><b>4.2-</b>Students speculate on why certain products originate in and/or are important to particular cultures by analyzing selected products from the target cultures and their own.</p>	<p>(lián...dōu/yě)</p> <p>3. Potential Complements with Verb + 不下 (bu xià)</p> <p>4. 多 (duō) Indicating an Approximate Number</p> <p>5. Question Pronouns with 都/也 (dōu/yě)</p> <p><b>Culture Highlights:</b> College dorms in China</p> <p>Renting an apartment in China</p> <p>Raising pets in China</p>	<p>common pieces of furniture.</p> <p>Students will state how long they have been living at their current residence</p> <p>Students will comment briefly on why a place is or isn't good for someone.</p> <p>Students will discuss and negotiate rent, utilities and security deposits.</p>	<p>Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b> Self assessments of language acquisition based on short questionnaire.</p> <p>Vocabulary Quiz</p> <p>Written newspaper ad either requesting or advertising an apartment for rent.</p>
<p><b>Unit Eighteen: Sports</b> <b>Timeline: 2-3 weeks</b></p>			
<p><b>1.1-</b>Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.3-</b>Students write or tell about products or practices of their own culture or the target-language cultures. They use language supported by visual cues such as posters, pictures, props, etc.</p> <p><b>2.1-</b>Students observe, identify and discuss simple patterns of behavior or interaction in various settings such as school, family and the community in the target-language cultures.</p> <p><b>2.2-</b>Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods.</p> <p><b>3.1-</b>Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, mathematical terms and scientific information</p>	<p>Sports</p> <p><b>Forms and Accuracy</b></p> <p>1. Duration of Non-Action</p> <p>2. 好/ (hǎo/nán) + V</p> <p>3. 下去 (xia qu) Indicating Continuation</p> <p>4. Duration of Actions</p> <p>5. The Particle (zhe)</p> <p>6. 被/叫/ (bèi/jiào/ràng) in Passive-Voice Sentences</p> <p><b>Culture Highlights:</b> “Putting on weight” in China</p> <p>“Football” in China</p>	<p><b>Learning Targets</b></p> <p>Students will name some popular sports</p> <p>Students will talk about their exercise habits.</p> <p>Students will discuss their feelings about various sports.</p> <p>Students will make a simple comparison between how soccer and American football are played.</p>	<p><b>Informal:</b> Teacher observation of in class dialogue. Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b> Vocabulary Quiz</p> <p>Self assessments of language acquisition based on short questionnaire.</p> <p>Journal entry</p> <p>Vocabulary quiz</p>

<p>4.2 -Students speculate on why certain products originate in and/or are important to particular cultures by analyzing selected products from the target cultures and their own.</p> <p>5.2-Students use various media from the language and culture for entertainment or personal pleasure.</p>	<p>Morning exercises in China</p> <p>TV channels in China</p>		
<p><b>Unit Nineteen: Travel</b> <b>Timeline: 3 weeks</b></p>			
<p>1.1-Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p>1.2 -Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics</p> <p>2.1-Students observe, identify and discuss simple patterns of behavior or interaction in various settings such as school, family and the community in the target-language cultures.</p> <p>3.1-Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, mathematical terms and scientific information</p> <p>3.2-Students use sources intended for same-age speakers of the target language to prepare reports on topics of personal interest, or those with which they have limited previous experience.</p> <p>4.1-Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning.</p> <p>4.2 -Students speculate on why certain products originate in</p>	<p>Travel</p> <p><b>Forms and Accuracy</b></p> <p>1. 不得了(bù déliǎo, extremely)</p> <p>2. Question Pronouns as Indefinite References (Whoever, Whatever, etc.)</p> <p>3. Numbers over One Thousand</p> <p>4. Comparative Sentences with 比 (bǐ) (II)</p> <p><b>Culture Highlights:</b> Travel agencies in China</p> <p>Travel season in China</p>	<p><b>Learning Targets</b></p> <p>Students will talk about their plans for summer vacation.</p> <p>Students will describe what kind of city Beijing is.</p> <p>Students will describe their travel itinerary.</p> <p>Students will ask for discounts, compare airfares and routes and book an airplane ticket</p> <p>Students will ask about seat assignments and request meal accommodations based on their dietary restrictions or preferences.</p>	<p><b>Informal:</b></p> <p>Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b></p> <p>Vocabulary Quiz</p> <p>Self assessments of language acquisition based on short questionnaire.</p> <p>Journal Entry</p> <p>Create and present a travel itinerary</p> <p>Presentation rubric</p> <p>Peer assessments</p>

<p>and/or are important to particular cultures by analyzing selected products from the target cultures and their own.</p> <p>5.2-Students use various media from the language and culture for entertainment or personal pleasure.</p>			
<p><b>Unit Twenty: At the Airport</b> <b>Timeline: 2 weeks</b></p>			
<p>1.1 -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p>1.2 -Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics</p> <p>1.3-Students write or tell about products or practices of their own culture or the target-language cultures. They use language supported by visual cues such as posters, pictures, props, etc.</p> <p>3.1-Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, mathematical terms and scientific information</p> <p>3.2-Students use sources intended for same-age speakers of the target language to prepare reports on topics of personal interest, or those with which they have limited previous experience.</p> <p>4.2 -Students speculate on why certain products originate in and/or are important to particular cultures by analyzing selected products from the target cultures and their own.</p> <p>5.2-Students use various media from the language and culture for entertainment or personal pleasure.</p>	<p>At the Airport</p> <p><b>Forms and Accuracy</b></p> <p>1. 的 (de), 得 (de), 地 (de) Compared</p> <p>2. ...的候 (...de shíhou) and ...以后 (...yǐhòu) Compared</p> <p>3. (hái) + Positive Adjective</p> <p>4. Kinship Terms</p> <p><b>Culture Highlights:</b></p> <p>Domestic flights in China</p> <p>Beijing Roast Duck in Chinese food culture.</p>	<p><b>Learning Targets</b></p> <p>Students will check in at the airport</p> <p>Students will wish departing friends a safe journey and remind them to keep in touch.</p> <p>Students will greet guests at the airport.</p> <p>Students will compliment someone on his or her language ability.</p> <p>Students will ask about someone's health.</p>	<p><b>Informal:</b></p> <p>Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b></p> <p>Vocabulary Quiz</p> <p>Self assessments of language acquisition based on short questionnaire.</p> <p>Journal Entry</p>

## Curriculum Framework for Chinese 2

School: Newark Charter School

Curricular Tool: Integrated Chinese 2 – Cheng & Tsui Company

Grade: N/A

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<b>Unit One: 開學/开学</b> <b>Timeline : 2 weeks</b>			
<p><b>1.1</b> -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures.</p> <p><b>1.2</b> - Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>1.3-</b> Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p><b>3.1</b> -Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, health and physical fitness and the performing arts.</p> <p><b>4.1</b>-Students demonstrate an awareness of ways of expressing respect and communicating status differences in their own language and the language they are learning.</p> <p><b>4.2</b>-Students hypothesize the relationship between the</p>	<p><b><u>Forms and Accuracy</u></b></p> <p>1. The Dynamic Particle 了(I)</p> <p>2. The 是...的... Construction</p> <p>3. 除了...以外</p> <p>4. 再說/再说</p> <p>5. Connecting Sentences (I)</p> <p><b><u>Words and Phrases</u></b></p> <p>A. 覺得/觉得 (to feel)</p> <p>B. 方便 (convenient)</p> <p>C. 安全 (safe)</p> <p>D. 省錢/省钱 (to save money; to economize)</p> <p>E. 自由 (free; unconstrained)</p> <p>F. 不見得/不见得 (not necessarily)</p> <p>G. 好處/好处 (advantage; benefit)</p> <p>H. 適應/适应 (to adapt; to</p>	<p><b><u>Learning Targets</u></b></p> <p>Students will explain how to write their Chinese name.</p> <p>Students will say where they were born and grew up.</p> <p>Students will discuss the pros and cons of living on and off campus.</p> <p>Students will express politely a dissenting opinion.</p>	<p><b><u>Informal:</u></b></p> <p>Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b><u>Formal Assessment:</u></b></p> <p>Research of American students living on and off campus and compare that to the Cultural Highlights information, plus independently found information and identify similarities and differences in the culture of student housing. Students will write a summary of their findings.</p> <p>Self assessments of language acquisition based on short questionnaire.</p> <p>Vocabulary Quiz:</p> <p>Chinese-English, English-Chinese matching of phrases and translations.</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
products and perspectives in the cultures studied and compare and contrast them with their own.	become accustomed  <b><u>Culture Highlights:</u></b> Housing for undergraduate students in China. Disambiguating homophones in Chinese.		
<b>Unit Two: 宿舍</b> <b>Timeline: 3-4 weeks</b>			
<p><b>1.1</b> -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures.</p> <p><b>1.2</b> - Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>1.3</b>- Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p><b>3.2</b>-Students read, listen to and talk about age-appropriate school content, folk tales, short stories, internet sites, poems and songs written for native speakers of the target language</p> <p><b>4.1</b>-Students demonstrate an awareness of ways of expressing respect and communicating status differences in their own language and the language they are learning.</p>	<p><b><u>Forms and Accuracy</u></b></p> <ol style="list-style-type: none"> <li>Existential Sentences</li> <li>Adverb 真</li> <li>比較/比较</li> <li>得很</li> <li>那(麼)/那(么)</li> <li>Conjunctions</li> </ol> <p><b><u>Words and Phrases</u></b></p> <ol style="list-style-type: none"> <li>恐怕 (I'm afraid; I think perhaps)</li> <li>差不多 (about; roughly)</li> <li>吵 (noisy; to quarrel)</li> <li>安靜/安静 (quiet)</li> <li>一般 (generally speaking)</li> <li>不怎麼樣/不怎么样 (not that great; just so-so)</li> <li>地道 (authentic; genuine; pure)</li> </ol>	<p><b><u>Learning Targets</u></b></p> <p>Students will name basic pieces of furniture in a house.</p> <p>Students will describe their living quarters.</p> <p>Students will comment on someone's living quarters.</p> <p>Students will disagree tactfully.</p> <p><b><u>Culture Highlights:</u></b>            Housing for graduate students in China</p> <p>Housing for international students in China.</p>	<p><b><u>Informal:</u></b>            Teacher observation of in class dialogue.             Observation of student use of Chinese Input Tool.             Interactive Word Wall             Questioning             Journal</p> <p><b><u>Formal Assessment:</u></b>            Students will sketch out their idea of dormitory or apartment living quarters, or what they hope their future dorm or college apartment will look like and accurately describe the furniture and overall living quarters.</p> <p>Self assessments             Peer assessments             Vocabulary Quiz:             Chinese-English, English-Chinese</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
matching of phrases and translations.			
<b>Unit Three: 在飯館兒/ 在饭馆儿</b> <b>Timeline: 3 weeks</b>			
<p><b>1.1</b> -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures.</p> <p><b>1.2</b> - Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>1.3-</b> Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p><b>2.1-</b> Students demonstrate the importance of following cultural expectations while participating in cultural practices.</p> <p><b>3.1</b> -Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, health and physical fitness and the performing arts.</p> <p><b>4.1-</b>Students demonstrate an awareness of ways of expressing respect and communicating status differences in their own language and the language they are learning.</p> <p><b>4.2-</b>Students hypothesize the relationship between the</p>	<p><b>Forms and Accuracy</b></p> <ol style="list-style-type: none"> <li>1. Topic-Comment Sentence Structure</li> <li>2. — + V</li> <li>3. 又 Adj/Verb, 又 Adj/Verb</li> <li>4. The Emphatic 是</li> <li>5. 不如</li> </ol> <p><b>Words and Phrases</b></p> <ol style="list-style-type: none"> <li>A. 正好 (coincidentally)</li> <li>B. 特别是 (especially)</li> <li>C. 麻煩/麻烦 ([may I] trouble [you]; troublesome)</li> <li>D. 這(就)要看...(了)/这(就)要看...(了) (that depends on...)</li> <li>E. 比如(說)/比如(说) (for example)</li> </ol> <p><b>Culture Highlights:</b></p> <p>Settling a bill and tipping in Chinese restaurants.</p> <p>Private banquet rooms in Chinese restaurants.</p> <p>Basic Chinese cooking</p>	<p><b>Learning Targets</b></p> <p>Students will name four principal regional Chinese cuisines.</p> <p>Students will order food and drinks.</p> <p>Students will talk about what flavors they like or dislike.</p> <p>Students will make their dietary restrictions or preferences known.</p>	<p><b>Informal:</b></p> <p>Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b></p> <p>Students write a letter to a Chinese speaking restaurant owner commenting on their favorite regional dishes.</p> <p>Vocabulary Quiz</p> <p>Chinese-English, English-Chinese matching of phrases and translations.</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>products and perspectives in the cultures studied and compare and contrast them with their own.</p> <p><b>5.2-</b>Students consult various sources in the target language to obtain information on topics of personal interest. Students also establish communication with speakers of the target language.</p>	<p>techniques</p> <p>Major culinary styles in China.</p>		
<p><b>Unit Four: 買東西 买东西</b></p> <p><b>Timeline: 3 weeks</b></p>			
<p><b>1.1</b> -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures.</p> <p><b>1.2</b> - Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>1.3-</b> Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p><b>2.2-</b>Students search for, identify and investigate the function of utilitarian products (e.g., sports equipment, household items, tools, foods and clothing) of the culture studied as found within their homes and communities.</p> <p><b>3.2-</b>Students read, listen to and talk about age-appropriate school content, folk tales, short stories, internet sites, poems and songs written for native speakers of the target language</p>	<p><b><u>Forms and Accuracy</u></b></p> <p>1. 無論..., 都.../无论..., 都...</p> <p>2. Conjunction 於是/于是</p> <p>3. Adj/V+是+Adj/V, 可是/但是...</p> <p>4. Adverb 難道/难道</p> <p><b><u>Words and Phrases</u></b></p> <p>A. 什麼的/...什么的 (...etc.)</p> <p>B. 大小, 長短/长短, 寬窄/宽窄... (size, length, width...)</p> <p>C. 打折 (to discount; to sell at a discount)</p> <p>D. (要) 不然 (otherwise)</p> <p>E. 非...不可 (have to; must)</p> <p>F. 標準/标准 (criterion; standard)</p> <p>G. 在乎 (to mind; to care)</p>	<p><b><u>Learning Targets</u></b></p> <p>Students will name basic clothing, bedding and bath items.</p> <p>Students will describe their shopping preferences and criteria.</p> <p>Students will disagree with other tactfully.</p> <p>Students will present their arguments with rhetorical questions.</p>	<p><b><u>Informal:</u></b></p> <p>Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b><u>Formal Assessment:</u></b></p> <p>Students research advertisements in the Chinese language.</p> <p>Students email a store or service in China asking about or commenting on advertisements.</p> <p>Vocabulary quiz</p> <p>Chinese-English, English-Chinese matching of phrases and translations.</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p><b>4.2-</b>Students hypothesize the relationship between the products and perspectives in the cultures studied and compare and contrast them with their own.</p> <p><b>5.1-</b>Students contact local agencies to secure information regarding products or practices of target-language cultures.</p> <p><b>5.2-</b>Students consult various sources in the target language to obtain information on topics of personal interest. Students also establish communication with speakers of the target language.</p>	<p><b><u>Culture Highlights:</u></b> Knowing when to bargain</p> <p>Cash, credit card, or personal check.</p>		
<p><b>Unit Five: 选课</b></p> <p><b>Timeline: 3 weeks</b></p>			
<p><b>1.1</b> -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures.</p> <p><b>1.2</b> - Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>1.3-</b> Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p><b>4.1-</b>Students demonstrate an awareness of ways of expressing respect and communicating status differences in their own language and the language they are learning.</p>	<p><b><u>Forms and Accuracy</u></b></p> <ol style="list-style-type: none"> <li>對...來說/对...来说</li> <li>Resultative Complements</li> <li>Preposition 至於/至于</li> <li>另外</li> <li>再, 又, and 還/还</li> <li>要麼..., 要麼.../要么..., 要么...</li> </ol> <p><b><u>Words and Phrases</u></b></p> <ol style="list-style-type: none"> <li>只是 or 就是 (it's just that)</li> <li>受不了 (unable to bear)</li> <li>肯定 (definitely)</li> <li>跟...打交道 (to deal with...)</li> </ol>	<p><b><u>Learning Targets</u></b></p> <p>Students will state their major area of study/academic department and some required general course they have taken.</p> <p>Students will talk about what they plan to do after graduating.</p> <p>Students will explore what will enhance their future job opportunities. Students will explain whether their family members have an influence on their choice of major and career path.</p> <p>Students will share tips on how to save money for</p>	<p><b><u>Informal:</u></b> Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b><u>Formal Assessment:</u></b> Written comparisons of American and Chinese educational systems.</p> <p>Vocabulary quiz:</p> <p>Chinese-English, English-Chinese matching of phrases and translations.</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
	E. 這樣/这样 (in this way) F. 不過/不过 (but)  <u><b>Culture Highlights:</b></u> The compartmentalized educational system in China  Graduate school or research institute	their education.	
<b>Review: Let's Review</b> <b>Timeline: 1-2 days</b>			
<p><b>1.1-</b> Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.2-</b> Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p><b>4.1-</b> Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning.</p>	<u><b>Forms and Accuracy</b></u> 1. Chinese Character Crossword Puzzles 2. Make a Word List 3. Organize Your Thoughts 4. Let Me Explain Myself	Students will review Lessons 1 - 5	<u><b>Informal:</b></u> Teacher observation of in class dialogue.  Observation of student use of Chinese Input Tool.  Interactive Word Wall  Questioning  Journal  Skit using themes studied to this point  <u><b>Formal Assessment:</b></u> Vocabulary quiz  Skit using themes studied to this point  Rubric  Self Assessment  Chinese-English, English-Chinese matching of phrases and translations.

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<b>Unit Six: 男朋友 女朋友</b> <b>Timeline: 3 weeks</b>			
<p><b>1.1</b> -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures.</p> <p><b>1.2</b> - Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>1.3</b>- Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p><b>3.1</b> -Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, health and physical fitness and the performing arts.</p> <p><b>4.1</b>-Students demonstrate an awareness of ways of expressing respect and communicating status differences in their own language and the language they are learning.</p>	<p><b><u>Forms and Accuracy</u></b></p> <ol style="list-style-type: none"> <li>1. (在)...上</li> <li>2. V來V去/V來V去</li> <li>3. Adverbials and 地 (de)</li> <li>4. 的, 得, and 地 Compared</li> <li>5. 原來/原来 as Adverb and Adjective</li> <li>6. Set Phrases</li> </ol> <p><b><u>Words and Phrases</u></b></p> <ol style="list-style-type: none"> <li>A. 到底 (what on earth; what in the world; in the end)</li> <li>B. 根本 (at all, simply)</li> <li>C. 一乾二淨/一干二淨 (completely, thoroughly, spotless)</li> <li>D. 難怪/难怪 (no wonder)</li> <li>E. 實際上/实际上 (actually; in fact; in reality)</li> <li>F. 丟三拉四 (scatterbrained; forgetful)</li> <li>G. 一會兒..., 一會兒..., 一會兒又.../一会儿..., 一会儿..., 一会儿又... (one minute..., the next minute)</li> </ol>	<p><b><u>Learning Targets</u></b></p> <p>Students will say if they have an upbeat personality.</p> <p>Students will state if they share their interests or hobbies with others.</p> <p>Students will inquire if everything is OK and find out what happened.</p> <p>Students will describe typical behaviors of a forgetful person</p> <p>Students will give a simple description of what they look for in a friend.</p> <p>Students will tell what makes them anxious or angry.</p>	<p><b><u>Informal:</u></b> Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b><u>Formal Assessment:</u></b> Vocabulary quiz</p> <p>Skit</p> <p>Rubric</p> <p>Self Assessment</p> <p>Chinese-English, English-Chinese matching of phrases and translations.</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
	<p><b><u>Culture Highlights:</u></b> Dating and marriage in China</p> <p>Chinese Valentine's Day</p>		
<p><b>Unit Seven: 電腦和網絡 电脑和网络</b></p> <p><b>Timeline: 2 weeks</b></p>			
<p><b>1.1</b> -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures.</p> <p><b>1.2</b> - Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>1.3-</b> Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p><b>2.2-</b>Students search for, identify and investigate the function of utilitarian products (e.g., sports equipment, household items, tools, foods and clothing) of the culture studied as found within their homes and communities.</p> <p><b>3.2-</b>Students read, listen to and talk about age-appropriate school content, folk tales, short stories, internet sites, poems and songs written for native speakers of the target language</p>	<p><b><u>Forms and Accuracy</u></b></p> <ol style="list-style-type: none"> <li>1. Conjunction 甚至</li> <li>2. Potential Complements</li> <li>3. 好 as a Resultative Complement</li> <li>4. Connecting Sentences (II)</li> </ol> <p><b><u>Words and Phrases</u></b></p> <p>A. 從...到.../从...到... (from...to...)</p> <p>B. 結果/结果 (as a result)</p> <p>C. 或者 (or)</p> <p>D. 害(得) (to cause trouble [so that]); to do harm [so that])</p> <p>E. 幾乎/几乎 (almost)</p> <p>F. 看起來/看起来 (it seems)</p> <p>G. 聽起來/听起来 (it sounds)</p> <p><b><u>Culture Highlights:</u></b> Trendy new words in China</p>	<p><b><u>Learning Targets</u></b></p> <p>Students will find out if others are angry with them and apologize if so</p> <p>Students will reduce potential tension in a conversation by changing the subject</p> <p>Students will let people know about the trouble they had to go through because of their thoughtlessness or carelessness.</p> <p>Students will name their activities on the internet and discuss how they make use of the internet.</p> <p>Students will discuss the pros and the cons of using the internet.</p>	<p><b><u>Informal:</u></b> Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p>Skit</p> <p><b><u>Formal Assessment:</u></b> Vocabulary quiz</p> <p>Skit</p> <p>Self Assessment Chinese-English, English-Chinese matching of phrases and translations.</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>4.1-Students demonstrate an awareness of ways of expressing respect and communicating status differences in their own language and the language they are learning.</p>	<p>Instant messaging in China</p>		
<p><b>Unit Eight: 打工</b> <b>Timeline: 3 weeks</b></p>			
<p>1.1 -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures.</p> <p>1.2 - Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p>1.3- Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p>2.2-Students search for, identify and investigate the function of utilitarian products (e.g., sports equipment, household items, tools, foods and clothing) of the culture studied as found within their homes and communities.</p> <p>3.2-Students read, listen to and talk about age-appropriate school content, folk tales, short stories, internet sites, poems and songs written for native speakers of the target language</p> <p>4.2-Students hypothesize the relationship between the products and perspectives in the cultures studied and</p>	<p><b>Forms and Accuracy</b></p> <p>1. Directional Complements Suggesting Result</p> <p>2. 來/来 Connecting Two Verb Phrases</p> <p>3. The Dynamic Particle 了 (II)</p> <p>4. Rhetorical Questions</p> <p>5. Adverb</p> <p><b>Words and Phrases</b></p> <p>A. 壓力/压力 (pressure)</p> <p>B. 受到 (to receive)</p> <p>C. 減輕/减轻 (to lessen)</p> <p>D. 適合/适合 (to suit) and 合適/合适 (suitable)</p> <p>E. 影響/影响 (to influence or affect; influence)</p> <p>F. 取得 (to obtain)</p> <p>G. 說到/说到 (speaking of)</p> <p>H. 嫌 (to dislike)</p> <p>I. 不是A, 就是B (if it's not A, it's B; either A or B):</p>	<p><b>Learning Targets</b></p> <p>Students will review their monthly income and spending patterns.</p> <p>Students will talk about how they balance their personal budget.</p> <p>Students will name some possible reasons to work part-time while in school.</p> <p>Students will discuss the pros and cons of working part-time while in school.</p> <p>Students will describe what they dislike or what bothers them.</p>	<p><b>Informal:</b></p> <p>Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning Journal</p> <p><b>Formal Assessment:</b></p> <p>Vocabulary quiz</p> <p>Brochure for or against working part time while in school.</p> <p>Debate</p> <p>Rubrics</p> <p>Self Assessment</p> <p>Chinese-English, English-Chinese matching of phrases and translations.</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
compare and contrast them with their own.	<p>J. 多 (How...it is!)</p> <p><b>Culture Highlights:</b> Educational expenses in China</p> <p>Part-time jobs for college students in China</p>		
<p><b>Unit Nine: 教育</b></p> <p><b>Timeline: 2-3 weeks</b></p>			
<p><b>1.1</b> -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures.</p> <p><b>1.2</b> - Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>1.3</b>- Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p><b>3.2</b>-Students read, listen to and talk about age-appropriate school content, folk tales, short stories, internet sites, poems and songs written for native speakers of the target language</p> <p><b>4.1</b>-Students demonstrate an awareness of ways of expressing respect and communicating status differences in their own language and the language they</p>	<p><b>Forms and Accuracy</b></p> <ol style="list-style-type: none"> <li>1. Adverb 才</li> <li>2. Descriptive Complements</li> <li>3. Adverb 並/并</li> <li>4. Adjectives as Predicates</li> <li>5. 不是A, 而是B</li> </ol> <p><b>Words and Phrases</b></p> <ol style="list-style-type: none"> <li>A. 一直 (all along; continuously)</li> <li>B. 好(不)容易 (with a lot of difficulty)</li> <li>C. 像...一樣/像...一樣 (as if)</li> <li>D. 可以說/可以说 (you could say)</li> <li>E. 這麼說/这么说 (so that means)</li> <li>F. 最好 (had better; it's best)</li> </ol>	<p><b>Learning Targets</b></p> <p>Students will comment if they had a stress-free childhood</p> <p>Students will name some typical classes offered in after-school programs</p> <p>Students will indicate agreement or disagreement</p> <p>Students will present their opinions</p> <p>Students will talk about parents' aspirations for their children.</p>	<p><b>Informal:</b></p> <p>Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b></p> <p>Vocabulary quiz</p> <p>Dragon and Phoenix study</p> <p>Rubric</p> <p>Chinese-English, English-Chinese matching of phrases and translations.</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>are learning.</p> <p><b>4.2-</b>Students hypothesize the relationship between the products and perspectives in the cultures studied and compare and contrast them with their own.</p> <p><b>5.1-</b>Students contact local agencies to secure information regarding products or practices of target-language cultures</p>	<p><b><u>Culture Highlights:</u></b> A Chinese model for friendship and mutual appreciation.</p> <p>Dragon and phoenix as metaphors.</p>		
<p><b>Unit Ten: 中國地理/ 中国地理</b></p> <p><b>Timeline: 2-3 weeks</b></p>			
<p><b>1.1</b> -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures.</p> <p><b>1.2</b> - Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>1.3-</b> Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p><b>2.2-</b>Students search for, identify and investigate the function of utilitarian products (e.g., sports equipment, household items, tools, foods and clothing) of the culture studied as found within their homes and communities</p> <p><b>3.1</b> -Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts,</p>	<p><b><u>Forms and Accuracy</u></b></p> <p>1. 起來/起来 Indicating the Beginning of an Action</p> <p>2. Conjunction 而</p> <p>3. 最Adj不過了/最Adj不过了</p> <p>4. 過/过 Indicating Experience</p> <p><b><u>Words and Phrases</u></b></p> <p>A. 為了/为了 (in order to) and 因為/因为 (because)</p> <p>B. 一下子 (in an instant)</p> <p>C. 大多 (mostly)</p> <p>D. 呢 (indicating a pause in speech)</p> <p><b><u>Culture Highlights:</u></b> The City of Harbin</p>	<p><b><u>Learning Targets</u></b></p> <p>Students will locate major Chinese cities, provinces, and rivers on the map.</p> <p>Students will give a brief introduction to the geographic features of China.</p> <p>Students will compare some basic geographic aspects of China and the United States.</p> <p>Students will describe features that may attract you to or deter you from visiting a tourist site.</p> <p>Students will plan a trip to China.</p>	<p><b><u>Informal:</u></b> Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b><u>Formal Assessment:</u></b> Vocabulary quiz</p> <p>Travel brochure</p> <p>Travel itinerary</p> <p>Rubric</p> <p>Self Assessment</p> <p>Chinese-English, English-Chinese matching of phrases and translations.</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>historical facts and concepts, health and physical fitness and the performing arts.</p> <p><b>3.2-</b>Students read, listen to and talk about age-appropriate school content, folk tales, short stories, internet sites, poems and songs written for native speakers of the target language</p> <p><b>4.2-</b>Students hypothesize the relationship between the products and perspectives in the cultures studied and compare and contrast them with their own.</p> <p><b>5.2-</b>Students consult various sources in the target language to obtain information on topics of personal interest. Students also establish communication with speakers of the target language.</p>	<p>The Yellow River The Yangtze River</p> <p>Yunnan Province</p> <p>Nationalities in China</p> <p>Administrative divisions in China</p>		
<p><b>Review: Let's Review</b> <b>Timeline: 1-2 days</b></p>			
<p><b>1.1-</b> Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.2-</b> Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p> <p><b>4.1-</b> Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning.</p>	<p><b><u>Forms and Accuracy</u></b></p> <ol style="list-style-type: none"> <li>1. Chinese Character Crossword Puzzles</li> <li>2. Matching Words</li> <li>3. Make a Word List</li> <li>4. Organize Your Thoughts</li> <li>5. Are You a Fluent Speaker?</li> </ol>	<p>Students will review lessons 6 - 10</p>	<p><b><u>Informal:</u></b> Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b><u>Formal Assessment:</u></b> Vocabulary quiz</p>
<p>Unit Eleven: 中國的節日/ 中国的节日</p> <p><b>Timeline: 2-3 weeks</b></p>			

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p><b>1.1</b> -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures.</p> <p><b>1.2</b> - Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>1.3</b>- Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p><b>2.1</b>- Students demonstrate the importance of following cultural expectations while participating in cultural practices.</p> <p><b>3.1</b> -Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, health and physical fitness and the performing arts.</p> <p><b>3.2</b>-Students read, listen to and talk about age-appropriate school content, folk tales, short stories, internet sites, poems and songs written for native speakers of the target language</p> <p><b>4.2</b>-Students hypothesize the relationship between the products and perspectives in the cultures studied and compare and contrast them with their own.</p> <p><b>5.1</b>-Students contact local agencies to secure information regarding products or practices of target-language cultures</p>	<p><b><u>Forms and Accuracy</u></b></p> <ol style="list-style-type: none"> <li>1. Adj/V + 著/着+ V</li> <li>2. Reduplication of Measure Words</li> <li>3. Preposition 以</li> <li>4. Particle 嘛</li> <li>5. (先)...再...</li> </ol> <p><b><u>Words and Phrases</u></b></p> <ol style="list-style-type: none"> <li>A. V起來/起来</li> <li>B. V得出(來)/V得出(来) (be able to tell)</li> <li>C. 氣氛/气氛 (atmosphere; ambiance)</li> <li>D. 傳統/传统 (tradition; traditional)</li> <li>E. 熱鬧/热闹 (lively; buzzing with excitement; bustling with</li> </ol> <p><b><u>Culture Highlights:</u></b></p> <p>The Spring Festival</p> <p>The Lantern Festival</p> <p>The Qingming Festival</p> <p>The Dragon Boat Festival</p> <p>The Mid-Autumn Festival</p>	<p><b><u>Learning Targets</u></b></p> <p>Students will name the major traditional Chinese holidays and explain when they occur</p> <p>Students will name the fold that is most associated with each of the major traditional Chinese holidays.</p> <p>Students will express New Year’s wishes</p> <p>Students will describe the festivities during the Chinese New Year period. Students will wish others success or good health.</p>	<p><b><u>Informal:</u></b></p> <p>Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p><b><u>Formal Assessment:</u></b></p> <p>Vocabulary quiz</p> <p>Research of a specific festival celebration.</p> <p>Rubrics</p> <p>Oral Presentation</p> <p>Chinese-English, English-Chinese matching of phrases and translations.</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>5.2-Students consult various sources in the target language to obtain information on topics of personal interest. Students also establish communication with speakers of the target language.</p>			
<p><b>Unit Twelve: 中國的變化/ 中国的变化</b>  <b>Timeline: 2 weeks</b></p>			
<p><b>1.2</b> - Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>1.3</b>- Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p><b>2.2</b>-Students search for, identify and investigate the function of utilitarian products (e.g., sports equipment, household items, tools, foods and clothing) of the culture studied as found within their homes and communities</p> <p><b>3.1</b> -Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, health and physical fitness and the performing arts.</p> <p><b>3.2</b>-Students read, listen to and talk about age-appropriate school content, folk tales, short stories, internet sites, poems and songs written for native speakers of the target language</p> <p><b>4.2</b>-Students hypothesize the relationship between the products and perspectives in the cultures studied and</p>	<p><b><u>Forms and Accuracy</u></b></p> <ol style="list-style-type: none"> <li>1. Adverb 竟(然)</li> <li>2. Particle 過/过</li> <li>3. End-of-Sentence Particle 啊</li> <li>4. 以 A 為/为 B</li> <li>5. 一 + Reduplicated Measure Word</li> <li>6. Adverb 可(是) Continued</li> </ol> <p><b><u>Words and Phrases</u></b></p> <ol style="list-style-type: none"> <li>A. 完全 (entirely; completely)</li> <li>B. 的確/的确 (indeed)</li> <li>C. 要不是 (if it were not for; but for)</li> <li>D. 從來/从来 (from past till present; always; at all times)</li> <li>E. 看來/看来 (it seems)</li> <li>F. 儘可能/尽可能 (as much as possible; do one's utmost)</li> </ol>	<p><b><u>Learning Targets</u></b></p> <p>Students will describe the sights and sounds of a major city</p> <p>Students will describe in basic terms some features of a historic tourist site.</p> <p>Students will give a simple account of the growth of a city from the past to the present.</p> <p>Students will express surprise at an unforeseen turn of events.</p>	<p><b><u>Informal:</u></b></p> <p>Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b><u>Formal Assessment:</u></b></p> <p>Vocabulary quiz</p> <p>City/landmark/tourist site “playing card”</p> <p>Rubric</p> <p>Self Assessment</p> <p>Chinese-English, English-Chinese matching of phrases and translations.</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
compare and contrast them with their own.	<p><b><u>Culture Highlights:</u></b> High-speed Rail in China</p> <p>The City of Nanjing</p> <p>Temples of Confucius</p>		
<p><b>Unit Thirteen: 旅遊/旅游</b></p> <p><b>Timeline: 1-2 weeks</b></p>			
<p><b>1.2</b> - Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>1.3</b>- Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p><b>2.1</b>- Students demonstrate the importance of following cultural expectations while participating in cultural practices.</p> <p><b>3.1</b> -Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, health and physical fitness and the performing arts.</p> <p><b>3.2</b>-Students read, listen to and talk about age-appropriate school content, folk tales, short stories, internet sites, poems and songs written for native speakers of the target language</p> <p><b>4.2</b>-Students hypothesize the relationship between the products and perspectives in the cultures studied and compare and contrast them with their own.</p>	<p><b><u>Forms and Accuracy</u></b></p> <p>1. Comparative Sentences 2. Numerals in Idioms 3. Multiple Attributives</p> <p><b><u>Words and Phrases</u></b></p> <p>A. 分別 (separately; respectively; to part from each other)</p> <p>B. 印象 (impression)</p> <p>C. 分享 (to share joy, happiness, benefit, or something pleasant or positive)</p> <p>D. 之前 (before; prior to)</p> <p>E. 只好 (have no choice but)</p> <p>F. 親眼, 親自, 親耳, 親手, 親身/亲眼, 亲自, 亲耳, 亲手, 亲身</p> <p>G. 千萬/千万 (by all means; absolutely must)</p> <p>H. 不過/不过 (however; no</p>	<p><b><u>Learning Targets</u></b></p> <p>Students will describe what costs may be covered in a package tour.</p> <p>Students will give a brief description of a Chinese sleeper car</p> <p>Students will describe natural objects such as mountains, rivers, trees and rocks.</p> <p>Students will discuss some things that tourists may expect to see or experience at a tourist site.</p>	<p><b><u>Informal:</u></b></p> <p>Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning Journal</p> <p><b><u>Formal Assessment:</u></b></p> <p>Vocabulary quiz</p> <p>City/landmark/tourist site “playing card” Rubric</p> <p>Chinese-English, English-Chinese matching of phrases and translations.</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
	more than)  <b><u>Culture Highlights:</u></b> The Stone Forest near Kunming  Famous Sights of Dali  The Old Town of Lijiang  Ethnic Diversity in Yunnan		
<b>Unit Fourteen: 生活與健康/ 生活与健康</b> <b>Timeline: 2 weeks</b>			
<p><b>1.1</b> -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures</p> <p><b>1.2</b> - Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>1.3</b>- Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target cultures.</p> <p><b>2.2</b>-Students search for, identify and investigate the function of utilitarian products (e.g., sports equipment, household items, tools, foods and clothing) of the culture studied as found within their homes and communities</p> <p><b>3.1</b> -Students demonstrate an understanding of the</p>	<p><b><u>Forms and Accuracy</u></b></p> <p>1. Disyllabic Words Becoming Monosyllabic</p> <p>2. Conjunction and Preposition 與/与</p> <p>3. 有的..., 有的...</p> <p>4. 使 and Pivotal Sentences</p> <p><b><u>Words and Phrases</u></b></p> <p>A. 顯得/显得 (to appear [to be]; to seem)</p> <p>B. 重視/重视 (to attach importance to; to think much of)</p> <p>C. 等於/等于 (to equal; to be equivalent to; to amount to)</p>	<p><b><u>Learning Targets</u></b></p> <p>Students will talk about their exercise routine. Students will outline some healthy eating habits.</p> <p>Students will describe habits that could make them age prematurely or harm their health.</p>	<p><b><u>Informal:</u></b> Teacher observation of in class dialogue.  Observation of student use of Chinese Input Tool.  Interactive Word Wall  Questioning Journal  <b><u>Formal Assessment:</u></b> Vocabulary quiz  Healthy eating menu/exercise plan  Food diary  Rubric  Self Assessment  Chinese-English, English-Chinese</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, health and physical fitness and the performing arts.</p> <p><b>4.2-</b>Students hypothesize the relationship between the products and perspectives in the cultures studied and compare and contrast them with their own.</p> <p><b>5.1-</b>Students contact local agencies to secure information regarding products or practices of target-language cultures</p>	<p>D. 只要...(就)... (only if; as long as)</p> <p>E. 隨便/随便 (casual; careless; to do as one pleases)</p> <p>F. 即使 (even if )</p> <p>G. 可見/可见 (it is obvious that; it can be seen that)</p> <p>H. 否則/否则 (otherwise)</p> <p><b><u>Culture Highlights:</u></b> Housing in Beijing</p> <p>Smoking in China</p> <p>Morning Exercises in Chinese Cities</p>		<p>matching of phrases and translations.</p>
<p><b>Unit Fifteen: 男女平等</b></p> <p><b>Timeline: 1-2 weeks</b></p>			
<p><b>1.1</b> -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures</p> <p><b>1.2</b> - Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>2.1-</b> Students demonstrate the importance of following cultural expectations while participating in cultural practices.</p>	<p><b><u>Forms and Accuracy</u></b></p> <ol style="list-style-type: none"> <li>1. Pronoun 某</li> <li>2. Adverb 畢竟/毕竟</li> <li>3. 是...的 to Affirm a Statement</li> <li>4. Complement 過來/过来</li> </ol> <p><b><u>Words and Phrases</u></b></p> <p>A. 逐漸/逐渐 (gradually; little by little)</p> <p>B. ...以來/以来 (since)</p>	<p><b><u>Learning Targets</u></b></p> <p>Students will talk about how couples treat each other as equals.</p> <p>Students will discuss gender equality in the workplace</p> <p>Students will summarize briefly the changes in Chinese women’s social status in the twentieth century.</p>	<p><b><u>Informal:</u></b></p> <p>Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b><u>Formal Assessment:</u></b></p> <p>Vocabulary quiz</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p><b>3.1</b> -Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, health and physical fitness and the performing arts.</p> <p><b>4.1</b>-Students demonstrate an awareness of ways of expressing respect and communicating status differences in their own language and the language they are learning.</p> <p><b>4.2</b>-Students hypothesize the relationship between the products and perspectives in the cultures studied and compare and contrast them with their own.</p> <p><b>5.2</b>-Students consult various sources in the target language to obtain information on topics of personal interest. Students also establish communication with speakers of the target language.</p>	<p>C. 拿...來說/拿...来说 (take...for example)</p> <p>D. 表現/表现 (to show; to display; to manifest; performance; manifestation)</p> <p>E. 看你說的/看你说的 (listen to yourself )</p> <p>F. 不得了 (extremely; exceedingly)</p> <p>G. 由 (by)</p> <p><b><u>Culture Highlights:</u></b> China’s Economic Reform Traditional Preference for Boys  China’s Women Athletes  Nuances of Various Gender Terms  Terms for Husband and Wife</p>	<p>Students will report the score and results of a sports game.</p>	<p>Chinese-English, English-Chinese matching of phrases and translations.</p>
<p><b>Review : Let’s Review</b> <b>Timeline: 1-2 days</b></p>			
<p><b>1.1-</b> Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.</p> <p><b>1.2-</b> Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.</p>	<p><b><u>Forms and Accuracy</u></b></p> <ol style="list-style-type: none"> <li>1. Chinese Character Crossword Puzzles</li> <li>2. Matching Words</li> <li>3. Put Your Thoughts into Words</li> <li>4. Presentation</li> <li>5. How Well Can You Speak?</li> </ol>	<p>Students will review lessons 11-15</p>	<p><b><u>Informal:</u></b> Teacher observation of in class dialogue.  Observation of student use of Chinese Input Tool.  Interactive Word Wall  Questioning</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p><b>4.1-</b> Students realize that cognates enhance comprehension of spoken and written language and demonstrate that awareness by identifying commonly occurring cognates in the language they are learning.</p>			<p>Journal</p> <p><b>Formal Assessment:</b> Vocabulary quiz: Chinese-English, English-Chinese matching of phrases and translations.</p>
<p><b>Unit Sixteen: 環境保護與 節約能源/ 环境保护与 节约能源</b></p> <p><b>Timeline: 2 weeks</b></p>			
<p><b>1.1</b> -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures</p> <p><b>1.2</b> - Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>2.2</b>-Students search for, identify and investigate the function of utilitarian products (e.g., sports equipment, household items, tools, foods and clothing) of the culture studied as found within their homes and communities</p> <p><b>3.1</b> -Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, health and physical fitness and the performing arts.</p>	<p><b>Forms and Accuracy</b></p> <ol style="list-style-type: none"> <li>1. V1的V1, V2的V2</li> <li>2. Adjectives That Can Be Reduplicated Like Verbs</li> <li>3. ...吧,...吧</li> <li>4. (有益)於/(有益)于</li> <li>5. Adj + 於/于</li> <li>6. V著V著/ V着V着</li> </ol> <p><b>Words and Phrases</b></p> <p>A. 想起(來)/想起(来) (to recall) vs. 想出(來)/想出(来) (to come up with)</p> <p>B. 環境保護/环境保护 (environmental protection)</p>	<p><b>Learning Targets</b></p> <p>Students will describe a scene in which people are busily engaged in all kinds of activities</p> <p>Students will talk about indicators of a clean environment</p> <p>Students will list some green energy sources</p> <p>Students will give examples of practices that are environmentally friendly</p>	<p><b>Informal:</b> Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall</p> <p>Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b> Vocabulary quiz</p> <p>Chinese-English, English-Chinese matching of phrases and translations.</p> <p>Fact sheet based on research on what China has done to “Go Green.”</p>

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p><b>3.2-</b>Students read, listen to and talk about age-appropriate school content, folk tales, short stories, internet sites, poems and songs written for native speakers of the target language</p> <p><b>4.2-</b>Students hypothesize the relationship between the products and perspectives in the cultures studied and compare and contrast them with their own.</p> <p><b>5.1-</b>Students contact local agencies to secure information regarding products or practices of target-language cultures</p>	<p>C. 可不是嗎/可不是嗎 (Isn't that so? How true!)</p> <p>D. 造成 (to cause; to give rise to)</p> <p>E. 從...做起/從...做起 (to start with)</p> <p>F. 不堪設想/不堪設想 ([of consequences] too ghastly to contemplate; unimaginable; extremely bad or dangerous)</p> <p><b>Culture Highlights:</b> Ban on Plastic Shopping Bags</p> <p>Green Power Regulating Air-Conditioning Temperature</p>		

Unit Seventeen: **理財與投資/ 理财与投资**

**Timeline: 2 weeks**

<p><b>1.1</b> -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students exchange information about personal events, memorable experiences and other school subjects with peers and/or members of the target cultures</p> <p><b>1.2</b> - Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.</p> <p><b>2.2-</b>Students search for, identify and investigate the function of utilitarian products (e.g., sports equipment,</p>	<p><b>Forms and Accuracy</b></p> <p>1. 一向 vs. 一直</p> <p>2. Summary of the 把 Construction(I)</p> <p>3. Reduplication of Verbs</p> <p><b>Words and Phrases</b></p> <p>A. 引起 (to give rise to; to lead to)</p> <p>B. 算(是)(to count as; to be considered as)</p>	<p><b>Learning Targets</b></p> <p>Students will describe if they are a saver or a spender.</p> <p>Students will identify ways to invest money.</p> <p>Students will talk about ways to purchase a big-ticket item</p> <p>Students will describe their</p>	<p><b>Informal:</b></p> <p>Teacher observation of in class dialogue.</p> <p>Observation of student use of Chinese Input Tool.</p> <p>Interactive Word Wall Questioning</p> <p>Journal</p> <p><b>Formal Assessment:</b></p> <p>Vocabulary quiz</p>
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Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<p>household items, tools, foods and clothing) of the culture studied as found within their homes and communities</p> <p><b>3.1</b> -Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, health and physical fitness and the performing arts.</p> <p><b>3.2</b>-Students read, listen to and talk about age-appropriate school content, folk tales, short stories, internet sites, poems and songs written for native speakers of the target language</p> <p><b>5.2</b>-Students consult various sources in the target language to obtain information on topics of personal interest. Students also establish communication with speakers of the target language.</p>	<p>C. 合 (to combine; to join)</p> <p>D. 終於/终于 (at last; in the end; finally; eventually)</p> <p>E. 接著/接着 (to follow; to continue)</p> <p>F. 突然 (sudden; unexpected)</p> <p><b>Culture Highlights:</b> China's High Savings Rate</p> <p>Housing Reform</p> <p>China's Stock Exchanges</p>	<p>spending habits.</p> <p>Students will describe in basic terms the ups and downs of the stock market.</p>	<p>Budget creation</p> <p>Chinese-English, English-Chinese matching of phrases and translations.</p>

# Curriculum Framework for Performing Arts

School: Newark Charter

Curricular Tool: N/A

Course: Music Theory and Performance

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
<b>Unit One: The Musician's Raw Materials</b> <b>Timeline : 9 weeks</b>			
<p><b>1.1E</b> Imitate melodic patterns</p> <p><b>1.2E</b> Sing on pitch within the appropriate singing range</p> <p><b>1.3E</b> Sing on pitch in rhythm while applying a steady beat</p> <p><b>1.4E</b> Sing demonstrating proper posture and breathing</p> <p><b>1.5E</b> Sing demonstrating proper vocal technique</p> <p><b>1.6E</b> Sing expressively utilizing dynamics and phrasing</p> <p><b>1.7E</b> Sing call and response</p> <p><b>1.8E</b> Singing ostinati with songs</p> <p><b>1.9E</b> Sing in groups in response to gestures of a conductor</p> <p><b>1.10E</b> Sing rounds</p> <p><b>1.11E</b> Sing partner songs</p> <p><b>1.12E</b> Sing music in 2 and 3 parts</p> <p><b>1.13E</b> Sing in groups and blending vocal</p>	<p>A voice is a tool which when used according to the rules and apart from the rules can move others' emotions and/or communicate meaning.</p> <p>In order to engage in an ensemble one must be both a performer and a listener with the ability to react.</p> <p>To become a skilled performer requires persistence.</p> <p>Different instruments require different physical skill sets.</p> <p>Written music is a language that has symbols and rules that enable a musician or performer to maintain accurate communication over time and distance.</p> <p>Listening is an active endeavor.</p> <p>Music has its own vocabulary.</p>	<p><b>Essential Questions:</b> How conscious and deliberate is the process of creating good music?</p> <p>When does singing go from mere repetition or imitation to creative and artful performance?</p> <p>To what extent does participation in a vocal ensemble impact the performance of the ensemble?</p> <p>When does playing an instrument move from mere repetition or imitation to creative and artful performance?</p> <p>To what extent does participation in an instrumental ensemble impact the performance of the ensemble?</p> <p>Why learn to read and notate music? Why not?</p> <p>When is the best time to learn notation? According to whom?</p> <p>How essential is written music to the process of composition?</p> <p>When is sound considered music?</p>	<p><b>Informal:</b> Observation based assessment Peer assessment Written and verbal responses Self-evaluation.</p> <p><b>Formal Assessment:</b> Quiz on pitches in both treble and bass clef</p> <p>Quiz on melody, harmony and chord progressions.</p> <p>Quiz on identifying key signatures.</p> <p>Rhythmic dictation</p> <p>The teacher will listen to the students' perform 15-20 measures of musical selections in groups of 4-6 students. The groups will have the opportunity to select a section of the piece that they are comfortable with. The teacher will also have each student sing the selection individually.</p> <p>Rubrics</p> <p>Singing assessments on sight-reading in the keys of C, G, and D major with Solfege, using rubric B.</p>

<p>timbres</p> <p><b>1.14E</b> Sing a repertoire of songs representing different genres, styles and languages</p> <p><b>1.15E</b> Sing expressively with phrasing, dynamics and stylistic interpretation.</p> <p><b>1.16E</b> Sing music in 4 parts with and without accompaniment</p> <p><b>1.17E</b> Sing a repertoire of choral literature with expression and technical accuracy including songs performed from memory</p> <p><b>2.1E</b> Imitate rhythmic and melodic patterns on pitched and unpitched instruments</p> <p><b>2.2E</b> Perform on pitched and unpitched instruments in rhythm while applying a steady beat</p> <p><b>2.3E</b> Perform rhythm accompaniments by ear</p> <p><b>2.4E</b> Perform tonal accompaniments by ear</p> <p><b>2.5E</b> Perform melodies by ear using a melodic instrument</p> <p><b>2.6E</b> Perform with proper posture and breathing</p> <p><b>2.7E</b> Perform with proper instrument technique</p> <p><b>2.8E</b> Perform in groups in response to gestures</p>	<p>Vocabulary enables one to communicate.</p> <p>Knowledge of music provides more opportunities to connect with the meaning. Audience participation and reaction are an integral part of the performance.</p> <p>An audience is the central participant in a musical performance.</p> <p><b><u>UNIT CONCEPTS:</u></b>  Pitch  Notes on the Keyboard  Musical Notation  Intervals  Sharp Key Signatures  Circle of Fifths  Major Scale  Simple rhythms  Simple meters  Major Triads  Solfege  Rehearsing 2-4 part music or varied genres(see REPERTOIRE below)  Breathing and Posture  Tone Quality  Intonation  Balance/Blend  Dynamics  Unison vowels.  Phrasing and shaping lines.  Form</p>	<p>How does the concept of quality relate to musical performance?</p> <p>Is the historical context important to listening and/or analyzing music?</p> <p>Should you hear a performance to understand or appreciate it?</p> <p>Is it necessary to be able to hear to appreciate music?</p> <p>What is pitch and how does it relate to music?</p> <p>How is reading music similar to reading language?</p> <p>What are the basics of reading musical notation?</p> <p>How can musical notation show sounds that are short, long, high or low?</p> <p>How are notes identified on treble and bass clefs?</p> <p>What are scales, and why are they important to a musical composition?</p> <p>How are scales and keys interrelated?</p> <p>What are major, minor and parallel keys?</p> <p>What is the “Circle of Fifths”?</p>	<p>Written assessments on music vocabulary and symbols.</p>
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<p>of a conductor</p> <p><b>2.9E</b> Perform an independent part in an ensemble setting</p> <p><b>2.10E</b> Perform music representing diverse genres and styles</p> <p><b>2.11E</b> Perform in groups with blend and balance</p> <p><b>2.12E</b> Perform expressively with phrasing, dynamics and stylistic interpretation</p> <p><b>2.13E</b> Perform a repertoire of instrumental literature with expression and technical accuracy on a pitched or unpitched instrument</p> <p><b>5.1E</b> Identify and define standard notation symbols</p> <p><b>5.2E</b> Read rhythmic notation</p> <p><b>5.3E</b> Read melodic notation</p> <p><b>5.4E</b> Read a single line of an instrumental or vocal part</p> <p><b>5.5E</b> Notate symbols and terms for meter and rhythm</p> <p><b>5.6E</b> Notate symbols for pitch</p> <p><b>5.7E</b> Notate symbols and terms referring to dynamics, tempo and articulation</p> <p><b>5.8E</b> Read an instrumental or vocal score</p> <p><b>5.9E</b> Read unfamiliar music with tonal and</p>		<p>What is the difference between a half step and whole step?</p> <p>What are the formulae we use to build the different minor scales?</p> <p>What is Solfege and how is it used in music?</p> <p>What are the essentials of good posture for singing?</p> <p>What are the physical characteristics necessary for good breath support?</p> <p>What is an open, relaxed vocal sound?</p> <p>How are balance and blend achieved within a choir?</p> <p>How do dynamics affect the mood of a song?</p> <p>What is good intonation and how do we achieve it?</p> <p><b><u>Learning Targets:</u></b>  Students will be able to identify the properties of individual sounds</p> <p>Students will be able to identify pitch and the locate them on the keyboard</p> <p>Students will be able to identify simple rhythms with quarter, half and whole notes</p>	
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<p>rhythmic accuracy</p> <p><b>5.10E</b> Read simple melodies in 2 or more clefs</p> <p><b>6.1E</b> Express changes and contrasts in music through movement</p> <p><b>6.3E</b> Identify and classify voices by range and quality</p> <p><b>6.4E</b> Identify and describe basic music forms</p> <p><b>6.6E</b> Express through verbal and non-verbal means various styles/ genres of music</p> <p><b>6.7E</b> Identify the elements of music within a musical composition</p> <p><b>6.8E</b> Analyze form including theme and variation, basic binary, tertiary and rondo forms, and more complex forms</p> <p><b>6.9E</b> Identify and explain compositional devices and techniques used in a musical work</p>		<p>Students will be able to identify the following intervals: unison, octave, and major and minor thirds</p> <p>Students will be able to sing major scales and intervals using the solfege system.</p> <p>Students will be able to sight sing simple melodies in the keys studied.</p>	
	<b><u>REPERTOIRE</u></b>		
	<i>Rise Up This Day To Celebrate</i>	<p>Students will describe and perform music from the Classical period</p> <p>Students will sing phrases using repetition and contrast</p> <p>Students will identify and perform cadences</p>	
	<i>Down In The Valley</i>	<p>Students will read and perform music in <math>\frac{3}{4}</math> meter</p> <p>Students will define and demonstrate accurate intonation</p> <p>Students will read, write and perform music in the key of E<math>\beta</math> major</p>	
	<i>Elijah Rock!</i>	<p>Students will read and successfully perform syncopated rhythms</p> <p>Students will perform music that represent the African American spiritual</p>	

	<i>America the Beautiful</i>	Students will demonstrate musical artistry and appropriate performance practice Students will describe suspension using music terminology Students will identify the relationships between the other fine arts and those of music
	<i>Cantemos Alleluia</i>	Students will identify and perform music in ABA form Students will describe and perform parallel sixths Students will interpret the text in an expressive manner
	<i>Winter Storm</i>	Students will relate music to other subjects Students will use standard technology to describe a chord Students will read and perform syncopated rhythmic patterns
	<i>Shalom Aleichem</i>	Students will sing music using various articulation styles Students will write and perform music in the key of A minor Students will perform music that represents the Jewish culture.
	<i>Calypso Gloria</i>	Students will sing in Latin using tall, pure vowel sounds. Students will successfully perform music that contains calypso rhythms Students will create and perform rhythmic phrases

**Unit Two: Combinations of Materials to Create Tonality , Scales, Key Signatures, Intervals, and Triads; Performance.**

**Timeline: 9 weeks**

<p><b>1.1E</b> Imitate melodic patterns</p> <p><b>1.2E</b> Sing on pitch within the appropriate singing range</p> <p><b>1.3E</b> Sing on pitch in rhythm while pplying a steady beat</p> <p><b>1.4E</b> Sing demonstrating proper posture and breathing</p> <p><b>1.5E</b> Sing demonstrating proper vocal technique</p> <p><b>1.6E</b> Sing expressively utilizing dynamics and phrasing</p>	<p>A voice is a tool which when used according to the rules and apart from the rules can move others' emotions and/or communicate meaning.</p> <p>In order to engage in an ensemble one must be both a performer and a listener with the ability to react.</p> <p>To become a skilled performer requires persistence.</p>	<p>How conscious and deliberate is the process of creating good music?</p> <p>When does singing go from mere repetition or imitation to creative and artful performance?</p> <p>To what extent does participation in a vocal ensemble impact the performance of the ensemble?</p> <p>When is music deliberate and when is it spontaneous?</p> <p>When is sound considered music?</p>	<p><b><u>Informal:</u></b> Observation based assessment Peer assessment Written and verbal responses Self-evaluation</p> <p><b><u>Formal Assessment:</u></b> Quizzes on identifying notes  Sight-reading quizzes  Quizzes on key signatures  Quizzes on building scales  Quizzes on signing and writing intervals</p>
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<p><b>1.7E</b> Sing call and response</p> <p><b>1.8E</b> Singing ostinati with songs</p> <p><b>1.9E</b> Sing in groups in response to gestures of a conductor</p> <p><b>1.10E</b> Sing rounds</p> <p><b>1.11E</b> Sing partner songs</p> <p><b>1.12E</b> Sing music in 2 and 3 parts</p> <p><b>1.13E</b> Sing in groups and blending vocal timbres</p> <p><b>1.14E</b> Sing a repertoire of songs representing different genres, styles and languages</p> <p><b>1.15E</b> Sing expressively with phrasing, dynamics and stylistic interpretation.</p> <p><b>1.16E</b> Sing music in 4 parts with and without accompaniment</p> <p><b>1.17E</b> Sing a repertoire of choral literature with expression and technical accuracy including songs performed from memory</p> <p><b>2.1E</b> Imitate rhythmic and melodic patterns on pitched and unpitched instruments</p> <p><b>2.2E</b> Perform on pitched and unpitched instruments in rhythm while applying a steady beat</p> <p><b>2.3E</b> Perform rhythm accompaniments by ear</p>	<p>Written music is open to individual interpretation.</p> <p>The combinations of tone, texture, design, timbre, rhythm and theme are limited only by one's imagination.</p> <p>Compositions are written with a purpose that may be self-selected or imposed.</p> <p>Compositions are a communication of emotions.</p> <p>Arrangements are based on preexisting compositions.</p> <p>Arranging allows for freedom in format of presentation.</p> <p>Written music is a language that has symbols and rules that enable a musician or performer to maintain accurate communication over time and distance.</p> <p>Listening is an active endeavor.</p> <p>Music has its own vocabulary.</p> <p>Vocabulary enables one to communicate.</p> <p>Knowledge of music provides more Knowledge of</p>	<p>How does the concept of quality relate to musical performance?</p> <p>Is the historical context important to listening and/or analyzing music?</p> <p>Should you hear a performance to understand or appreciate it?</p> <p>Is it necessary to be able to hear to appreciate music?</p> <p>What is pitch and how does it relate to music?</p> <p>How rational is the creative process?</p> <p>How can I make a tune or piece my own?</p> <p>When does mere repetition or imitation become creative and artful performance?</p> <p>How essential is written music to the process of composition?</p> <p>Should music be rearranged that has already been created?</p> <p>What are the formulae we use to build the different minor scales?</p> <p>How do we build minor triads?</p> <p>What formula do we use to build a whole tone scale?</p> <p>What is musical articulation and how</p>	<p>Melodic dictation quizzes</p> <p>The teacher will listen to the students' perform 15-20 measures of musical selections in groups of 4-6 students. The groups will have the opportunity to select a section of the piece that they are comfortable with. The teacher will also have each student sing the selection individually.</p> <p>Rubrics</p> <p>Singing assessments on sight-reading in the keys of A and E and B major(+ relative minors) with Solfege Teacher will video tape the choir's performance at a rehearsal two weeks prior to concert, and then again at the concert. He/she will then watch the performances, and evaluate each student using the rubrics</p>
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<p><b>2.4E</b> Perform tonal accompaniments by ear</p> <p><b>2.5E</b> Perform melodies by ear using a melodic instrument</p> <p><b>2.6E</b> Perform with proper posture and breathing</p> <p><b>2.7E</b> Perform with proper instrument technique</p> <p><b>2.8E</b> Perform in groups in response to gestures of a conductor</p> <p><b>2.9E</b> Perform an independent part in an ensemble setting</p> <p><b>2.10E</b> Perform music representing diverse genres and styles</p> <p><b>2.11E</b> Perform in groups with blend and balance</p> <p><b>2.12E</b> Perform expressively with phrasing, dynamics and stylistic interpretation</p> <p><b>2.13E</b> Perform a repertoire of instrumental literature with expression and technical accuracy on a pitched or unpitched instrument</p> <p><b>4.1E</b> Compose short songs and instrumental pieces</p> <p><b>4.2E</b> Arrange short songs and/or instrumental pieces</p> <p><b>4.3E</b> Utilize standard written notation in composition of short songs</p>	<p>music provides opportunities to connect with the meaning.</p> <p>Audience participation and reaction are an integral part of the performance.</p> <p>An audience is the central participant in a musical performance.</p> <p><b><u>CONCEPTS:</u></b>  Solfège  Minor Triads  Flat Key Signatures  Natural Minor Scale  Harmonic Minor Scale  Melodic Minor Scale  Whole tone scale  Intervals  Rehearsing 2-4 part music(see repertoire below)  Continued study of music reading, solfège syllables, scales, and key signatures.  Internalizing Pitch  Articulation  Stage behavior  Group and individual responsibilities within a performance  Following a Conductor  Improvisation  Respect</p>	<p>How does it affect the music?</p> <p>What do you want the audience to feel when you are performing?</p> <p>How do facial expressions convey the mood of the text?</p> <p>What is the role of the conductor, and what must the singer do to ensure they are following the conductor?</p> <p>How are different sections combined to create musical compositions?</p> <p><b><u>Learning Targets:</u></b>  Students will understand and be able to identify half steps and whole steps.</p> <p>Students will understand and be able to sing major and minor scales on solfège.</p> <p>Students will be able to identify all of the Flat key signatures</p> <p>Students will be able to identify rhythms with quarter, eighth and sixteenth notes</p> <p>Students will understand and identify the following intervals: fourths, fifths, and the tritone</p> <p>Students will be able to sing major and minor scales and intervals using the solfège system.</p> <p>Students will be able to identify (aurally) natural, harmonic, and</p>	
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<p><b>4.6E</b> Organize the elements of music into compositions which are unified and varied</p> <p><b>5.1E</b> Identify and define standard notation symbols</p> <p><b>5.2E</b> Read rhythmic notation</p> <p><b>5.3E</b> Read melodic notation</p> <p><b>5.4E</b> Read a single line of an instrumental or vocal part</p> <p><b>5.5E</b> Notate symbols and terms for meter and rhythm</p> <p><b>5.6E</b> Notate symbols for pitch</p> <p><b>5.7E</b> Notate symbols and terms referring to dynamics, tempo and articulation</p> <p><b>5.8E</b> Read an instrumental or vocal score</p> <p><b>5.9E</b> Read unfamiliar music with tonal and rhythmic accuracy</p> <p><b>5.10E</b> Read simple melodies in 2 or more clefs</p> <p><b>6.1E</b> Express changes and contrasts in music through movement</p> <p><b>6.3E</b> Identify and classify voices by range and quality</p> <p><b>6.4E</b> Identify and describe basic music forms</p> <p><b>6.6E</b> Express through verbal and non-</p>		<p>melodic minor scales.</p> <p>Students will be able to identify (aurally) minor intervals.</p> <p>Students will be able to identify (aurally) major, minor, augmented, and diminished triads.</p> <p>Students will be able to notate melodies in a minor key in response to melodic dictation.</p> <p>Students will be able to distinguish between minor and major tonalities.</p> <p>Students will be able to sight sing a minor scale using solfege.</p> <p>Students will be able to sight sing simple melodies in the keys studied.</p>	
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<p>verbal means various styles/ genres of music</p> <p><b>6.7E</b> Identify the elements of music within a musical composition</p> <p><b>6.8E</b> Analyze form including theme and variation, basic binary, tertiary and rondo forms, and more complex forms</p> <p><b>6.9E</b> Identify and explain compositional devices and techniques used in a musical work</p>			
<b><u>REPERTOIRE</u></b>			
	Innsbruck, ich muss dich lassen	Students will be able to describe and perform music from the Renaissance period Students will be able to read and write music in 3/2 meter and 2/2 meter	
	Come Joyfully Sing	Students will be able to describe and perform music from the Baroque period Students will be able to perform music with accurate dynamics Students will be able to read and conduct rhythmic patterns in 3/4 meter.	
	Bless The Lord, O My Soul	Students will be able to read, write and perform rhythmic patterns with syncopation Students will be able to read and perform music in the key of E <sub>β</sub> major Students will be able to describe and perform music from the Romantic period	
	Sing To The Lord	Students will be able to perform music in mixed meter Students will be able to identify musical symbols Students will be able to perform music that represents the Contemporary period.	
	!Aleluya, Amen!	Students will be able to perform music in a mixed meter Students will be able to perform music representing the Dominican Republic culture	
	Bound For The Rio Grande	Students will be able to identify the melody line in music Students will be able to read and perform music in 6/8 meter Students will be able to perform music in the character in which it was written	
	City Called Heaven	Students will be able to read and perform music in 9/8 meter Students will be able to identify and perform tenuto markings Students will be able to perform music that represents the gospel style	

<b>Unit Three: Rhythm and Meter</b> <b>Timeline: 3 weeks</b>			
<p><b>1.1E</b> Imitate melodic patterns</p> <p><b>1.2E</b> Sing on pitch within the appropriate singing range</p> <p><b>1.3E</b> Sing on pitch in rhythm while applying a steady beat</p> <p><b>1.4E</b> Sing demonstrating proper posture and breathing</p> <p><b>1.5E</b> Sing demonstrating proper vocal technique</p> <p><b>1.6E</b> Sing expressively utilizing dynamics and phrasing</p> <p><b>1.7E</b> Sing call and response</p> <p><b>1.8E</b> Singing ostinati with songs</p> <p><b>1.9E</b> Sing in groups in response to gestures of a conductor</p> <p><b>1.10E</b> Sing rounds</p> <p><b>1.11E</b> Sing partner songs</p> <p><b>1.12E</b> Sing music in 2 and 3parts</p> <p><b>1.13E</b> Sing in groups and blending vocal timbres</p> <p><b>1.14E</b> Sing a repertoire of songs representing different genres, styles and languages</p> <p><b>1.15E</b> Sing expressively with phrasing,</p>	<p>A voice is a tool which when used according to the rules and apart from the rules can move others' emotions and/or communicate meaning.</p> <p>In order to engage in an ensemble one must be both a performer and a listener with the ability to react.</p> <p>To become a skilled performer requires persistence.</p> <p>Written music is open to individual interpretation.</p> <p>The combinations of tone, texture, design, timbre, rhythm and theme are limited only by one's imagination.</p> <p>Compositions are written with a purpose that may be self-selected or imposed.</p> <p>Compositions are a communication of emotions.</p> <p>Arrangements are based on preexisting compositions.</p> <p>Arranging allows for freedom in format of presentation.</p>	<p><b><u>Essential Questions:</u></b></p> <p>How conscious and deliberate is the process of creating good music?</p> <p>When does singing go from mere repetition or imitation to creative and artful performance?</p> <p>To what extent does participation in a vocal ensemble impact the performance of the ensemble?</p> <p>When is music deliberate and when is it spontaneous?</p> <p>How rational is the creative process?</p> <p>How can I make a tune or piece my own?</p> <p>When does mere repetition or imitation become creative and artful performance?</p> <p>How essential is written music to the process of composition?</p> <p>Should music be rearranged that has already been created?</p> <p>What is beat, and how is rhythm formed against it?</p> <p>How are sounds in time organized?</p> <p>How long is a beat?</p>	<p><b><u>Informal:</u></b></p> <p>Teacher will clap hands at a variety of tempi, while students demonstrate that they can match the beat.</p> <p>Teacher will clap rhythms while students echo clap and teacher observes performance</p> <p><b><u>Formal Assessment:</u></b></p> <p>Quizzes on rhythmic dictation</p> <p>Quizzes on analyzing and identifying rhythms within a piece of music</p> <p>Students will compose and perform rhythmic compositions</p> <p>The teacher will listen to the students' perform 15-20 measures of musical selections in groups of 4-6 students. The groups will have the opportunity to select a section of the piece that they are comfortable with. The teacher will also have each student sing the selection individually.</p> <p>Rubrics</p> <p>Singing assessments on sight-reading in the keys of F and Bb and Eb major(+ relative minors) with Solfege</p>

<p>dynamics and stylistic interpretation.</p> <p><b>1.16E</b> Sing music in 4 parts with and without accompaniment</p> <p><b>1.17E</b> Sing a repertoire of choral literature with expression and technical accuracy including songs performed from memory</p> <p><b>2.1E</b> Imitate rhythmic and melodic patterns on pitched and unpitched instruments</p> <p><b>2.2E</b> Perform on pitched and unpitched instruments in rhythm while applying a steady beat</p> <p><b>2.3E</b> Perform rhythm accompaniments by ear</p> <p><b>2.4E</b> Perform tonal accompaniments by ear</p> <p><b>2.5E</b> Perform melodies by ear using a melodic instrument</p> <p><b>2.6E</b> Perform with proper posture and breathing</p> <p><b>2.7E</b> Perform with proper instrument technique</p> <p><b>2.8E</b> Perform in groups in response to gestures of a conductor</p> <p><b>2.9E</b> Perform an independent part in an ensemble setting</p> <p><b>2.10E</b> Perform music representing diverse genres and styles</p> <p><b>2.11E</b> Perform in groups with blend and</p>	<p><b><u>CONCEPTS</u></b></p> <p>Rhythm</p> <p>Quarter Note</p> <p>Half Note</p> <p>Whole Note</p> <p>Eighth Note</p> <p>Sixteenth Note</p> <p>Meter/Time signature</p> <p>Simple Meters</p> <p>Syncopation</p> <p>Compound Meters</p> <p>Rehearsing 2-4 part music(see REPERTOIRE below)</p> <p>Continued study of music reading, solfege syllables, scales, and key signatures.</p> <p>Music careers</p> <p>Music in our world</p> <p>Consumer awareness</p> <p>Performance goals</p> <p>Critique/evaluation</p> <p>Listening</p> <p>Compare/Contrast</p>	<p>Why organize time in music?</p> <p>How are rhythmic ideas created?</p> <p>What determines a unit of time?</p> <p>What is the value of creating and observing works of music?</p> <p>How can empathy for another culture be developed by listening to its music?</p> <p><b><u>Learning Targets:</u></b></p> <p>Students will understand and identify simple duple, triple and quadruple meters</p> <p>Students will be able to compose rhythmic compositions.</p> <p>Students will be able to identify (aurally) the meter of a composition</p>	
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<p>balance</p> <p><b>2.12E</b> Perform expressively with phrasing, dynamics and stylistic interpretation</p> <p><b>2.13E</b> Perform a repertoire of instrumental literature with expression and technical accuracy on a pitched or unpitched instrument</p> <p><b>4.1E</b> Compose short songs and instrumental pieces</p> <p><b>4.2E</b> Arrange short songs and/or instrumental pieces</p> <p><b>4.3E</b> Utilize standard written notation in composition of short songs</p> <p><b>4.6E</b> Organize the elements of music into compositions which are unified and varied</p> <p><b>5.1E</b> Identify and define standard notation symbols</p> <p><b>5.2E</b> Read rhythmic notation</p> <p><b>5.3E</b> Read melodic notation</p> <p><b>5.4E</b> Read a single line of an instrumental or vocal part</p> <p><b>5.5E</b> Notate symbols and terms for meter and rhythm</p> <p><b>5.6E</b> Notate symbols for pitch</p> <p><b>5.7E</b> Notate symbols and terms referring to dynamics, tempo and articulation</p>			
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<p><b>5.8E</b> Read an instrumental or vocal score</p> <p><b>5.9E</b> Read unfamiliar music with tonal and rhythmic accuracy</p> <p><b>5.10E</b> Read simple melodies in 2 or more clefs</p> <p><b>6.1E</b> Express changes and contrasts in music through movement</p> <p><b>6.3E</b> Identify and classify voices by range and quality</p> <p><b>6.4E</b> Identify and describe basic music forms</p> <p><b>6.6E</b> Express through verbal and non-verbal means various styles/ genres of music</p> <p><b>6.7E</b> Identify the elements of music within a musical composition</p> <p><b>6.8E</b> Analyze form including theme and variation, basic binary, tertiary and rondo forms, and more complex forms</p> <p><b>6.9E</b> Identify and explain compositional devices and techniques used in a musical work</p>			
	<b><u>REPERTOIRE</u></b>		
	Duond Akuru	<p>Students will be able to read and perform rhythmic patterns that contain syncopation</p> <p>Students will be able to successfully sing in a foreign language using proper diction (Duoluo)</p> <p>Students will be able to perform music written in the style of African music</p>	

	I Know Where I'm Goin'	Students will be able to perform two-part music Students will be able to sing phrases expressively Students will be able to perform music representing the Irish culture	
	Kyrie	Students will be able to perform music with accurate pitch matching Students will be able to identify ABA form and coda Students will be able to perform music that represents the Contemporary period	
<b>Unit Four: Melody, Harmony, Composition</b> <b>Timeline: 9 weeks</b>			
<p><b>1.1E</b> Imitate melodic patterns</p> <p><b>1.2E</b> Sing on pitch within the appropriate singing range</p> <p><b>1.3E</b> Sing on pitch in rhythm while applying a steady beat</p> <p><b>1.4E</b> Sing demonstrating proper posture and breathing</p> <p><b>1.5E</b> Sing demonstrating proper vocal technique</p> <p><b>1.6E</b> Sing expressively utilizing dynamics and phrasing</p> <p><b>1.7E</b> Sing call and response</p> <p><b>1.8E</b> Singing ostinati with songs</p> <p><b>1.9E</b> Sing in groups in response to gestures of a conductor</p> <p><b>1.10E</b> Sing rounds</p> <p><b>1.11E</b> Sing partner songs</p> <p><b>1.12E</b> Sing music in 2 and 3 parts</p>	<p>A voice is a tool which when used according to the rules and apart from the rules can move others' emotions and/or communicate meaning.</p> <p>In order to engage in an ensemble one must be both a performer and a listener with the ability to react.</p> <p>To become a skilled performer requires persistence.</p> <p>Different instruments require different physical skill sets.</p> <p>Written music is a language that has symbols and rules that enable a musician or performer to maintain accurate communication over time and distance.</p> <p>Arrangements are based on preexisting compositions.</p> <p>Arranging allows for</p>	<ul style="list-style-type: none"> <li>• How is melody created?</li> <li>• Does melody have to be memorable to effectively communicate to an audience?</li> <li>• How does melody affect the mood of a composition?</li> <li>• Does melody have to be interesting to be meaningful?</li> <li>• What is harmony and how does it enhance a piece of music?</li> <li>• How does harmony determine musical style?</li> <li>• In what ways does harmony help to communicate a message to a listener?</li> <li>• How does harmony support a melodic line?</li> <li>• How do composers communicate?</li> <li>• What do composers communicate?</li> <li>• Why does form exist in music?</li> <li>• What is the role of contrast in the compositional process?</li> <li>• Why are patterns important in music?</li> <li>• How do we accurately sing in Latin?</li> </ul>	<p><b><u>Informal:</u></b> Create short melodies and analyze them in small groups.</p> <p>Compose short phrases mixed with ostinatos to create smaller works that convey a specific message, idea or mood.</p> <p>Write chords and chord progression that will later be used for a short composition.</p> <p>Analyze a piece of music looking for melody and harmony.</p> <p><b><u>Formal Assessment:</u></b> Quizzes on identifying chords and inversions within a piece of music using chord symbols, Roman Numerals and figured bass.</p> <p>Quizzes on identifying cadences.</p> <p>Quizzes on identifying non-chord tones within a melody.</p> <p>Singing assessments on sight-reading in the keys of Ab and Db and Gb major(+ relative minors) with Solfege, using rubric B.</p>

<p><b>1.13E</b> Sing in groups and blending vocal timbres</p> <p><b>1.14E</b> Sing a repertoire of songs representing different genres, styles and languages</p> <p><b>1.15E</b> Sing expressively with phrasing, dynamics and stylistic interpretation.</p> <p><b>1.16E</b> Sing music in 4 parts with and without accompaniment</p> <p><b>1.17E</b> Sing a repertoire of choral literature with expression and technical accuracy including songs performed from memory</p> <p><b>2.1E</b> Imitate rhythmic and melodic patterns on pitched and unpitched instruments</p> <p><b>2.2E</b> Perform on pitched and unpitched instruments in rhythm while applying a steady beat</p> <p><b>2.3E</b> Perform rhythm accompaniments by ear</p> <p><b>2.4E</b> Perform tonal accompaniments by ear</p> <p><b>2.5E</b> Perform melodies by ear using a melodic instrument</p> <p><b>2.6E</b> Perform with proper posture and breathing</p> <p><b>2.7E</b> Perform with proper instrument technique</p> <p><b>2.8E</b> Perform in groups in response to gestures of a conductor</p>	<p>freedom in format of presentation.</p> <p>Compositions are a communication of emotions.</p> <p>Compositions are written with a purpose that may be self-selected or imposed.</p> <p>The combinations of tone, texture, design, timbre, rhythm and theme are limited only by one's imagination.</p> <p>Improvising as part of an ensemble allows freedom within guidelines.</p> <p>Improvising as an individual allows complete creative freedom of expression.</p> <p>Improvisation is achieving a balance among technique, listening, understanding, communicating and responding.</p> <p><b><u>CONCEPTS</u></b></p> <p>Movement and rest in melody</p> <p>Conjunct and disjunct motion, melodic direction</p> <p>Rhythmic and melodic motives, melodic repetition and sequence</p> <p>Triad arrangements</p> <p>Triads in succession</p>	<ul style="list-style-type: none"> <li>• Students will understand that the main idea of most musical compositions is expressed through the melody.</li> <li>• Students will understand that melodies are organized into tonalities.</li> <li>• Students will understand that music is organized sound.</li> <li>• Students will understand that all music has value even if it differs from an individual's musical preferences.</li> <li>• Students will understand that music contains patterns within a tonal system.</li> <li>• Students will understand that music can be composed using tonalities other than major or minor.</li> <li>• Students will understand that chords and chord progressions are the foundation of tonal music.</li> <li>• Students will be able to compose melodies in major and minor tonalities.</li> <li>• Students will be able to compose melodies over a given chord progression.</li> <li>• Students will be able to write a four part composition.</li> <li>• Students will be able to display knowledge of music terminology when composing music.</li> <li>• Students will be able to evaluate various compositional elements within a piece of music.</li> <li>• Students will be able to respond to recorded music written by</li> </ul>	
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<p><b>2.9E</b> Perform an independent part in an ensemble setting</p> <p><b>2.10E</b> Perform music representing diverse genres and styles</p> <p><b>2.11E</b> Perform in groups with blend and balance</p> <p><b>2.12E</b> Perform expressively with phrasing, dynamics and stylistic interpretation</p> <p><b>2.13E</b> Perform a repertoire of instrumental literature with expression and technical accuracy on a pitched or unpitched instrument</p> <p><b>3.1E</b> Improvise rhythmically with voice or on instrument</p> <p><b>3.2E</b> Improvise ostinato accompaniments</p> <p><b>3.3E</b> Improvise unaccompanied melodies</p> <p><b>3.4E</b> Improvise melodic embellishments on given melodies in various tonalities</p> <p><b>3.5E</b> Improvise rhythmic variations on given melodies</p> <p><b>3.6E</b> Improvise melodic variations</p> <p><b>3.7E</b> Improvise melodies over basic chord progressions</p> <p><b>3.8E</b> Improvise melodies over given rhythm and tonal context</p> <p><b>3.9E</b> Improvise basic harmonic</p>	<p>Nonharmonic tones  Harmonizing a melody  Further harmonizations using I, ii, ii<sup>7</sup>, IV, V and V<sup>7</sup>  Chord symbols and their application in Jazz, Blues and Popular music.  Composition  Rehearsing 2-4 part music(see REPERTOIRE below)  Continued study of music reading, solfege syllables, scales, and key signatures.  Music of Various Cultures  Latin Text</p>	<p>various composers</p> <ul style="list-style-type: none"> <li>• Students will be able to improvise basic rhythms and melodies on unpitched percussion.</li> <li>• Students will be compose simple melodies with chord progressions on piano.</li> <li>• Students will understand that composition is a communication between the composer and the intended audience</li> <li>• Students will understand that patterns are inherent to musical compositions</li> </ul>	
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<p>accompaniment or bass line to a given melody</p> <p><b>3.10E</b> Improvise melodies over given rhythm and harmonic context consistent to the styles</p> <p><b>4.1E</b> Compose short songs and instrumental pieces</p> <p><b>4.2E</b> Arrange short songs and/or instrumental pieces</p> <p><b>4.3E</b> Utilize standard written notation in composition of short songs</p> <p><b>4.6E</b> Organize the elements of music into compositions which are unified and varied</p> <p><b>5.1E</b> Identify and define standard notation symbols</p> <p><b>5.2E</b> Read rhythmic notation</p> <p><b>5.3E</b> Read melodic notation</p> <p><b>5.4E</b> Read a single line of an instrumental or vocal part</p> <p><b>5.5E</b> Notate symbols and terms for meter and rhythm</p> <p><b>5.6E</b> Notate symbols for pitch</p> <p><b>5.7E</b> Notate symbols and terms referring to dynamics, tempo and articulation</p> <p><b>5.8E</b> Read an instrumental or vocal score</p> <p><b>5.9E</b> Read unfamiliar music with tonal and</p>			
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<p>rhythmic accuracy</p> <p><b>5.10E</b> Read simple melodies in 2 or more clefs</p> <p><b>6.1E</b> Express changes and contrasts in music through movement</p> <p><b>6.2E</b> Identify and classify instruments according to family</p> <p><b>6.3E</b> Identify and classify voices by range and quality</p> <p><b>6.4E</b> Identify and describe basic music forms</p> <p><b>6.5E</b> Identify and describe common instrumental and vocal ensembles</p> <p><b>6.6E</b> Express through verbal and non-verbal means various styles/ genres of music</p> <p><b>6.7E</b> Identify the elements of music within a musical composition</p> <p><b>6.8E</b> Analyze form including theme and variation, basic binary, tertiary and rondo forms, and more complex forms</p> <p><b>6.9E</b> Identify and explain compositional devices and techniques used in a musical work</p>			
	<b><u>REPERTOIRE</u></b>		
	Lakota Wiyanki	Students will be able to sing with proper vowel sounds Students will be able to perform music that represents the Native American culture	
	Miserere Nobis	Students will be able to sing with pure Latin vowels Students will be able to perform music with understanding of the Latin text	

	The River Sleeps Beneath The Sky	Students will be able to demonstrate musical artistry Students will understand how to read and perform dotted rhythms Students will be able to relate music to poetry
	Set Me As A Seal	Students will be able to identify compositional techniques found in the music Students will be able to read and write music in 4/4 meter Students will be able to demonstrate musical artistry through the use of proper breath management
	Sing Out This Maytime	Students will be able to identify music forms found in music (ABA) Students will be able to perform independently with accurate rhythm Students will be able to perform music with varying dynamics

## Curriculum Framework for Performing Arts

School: Newark Charter

Curricular Tool: N/A

Course: Global Advanced Chorus

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
<b>Unit One: Properly Using Your Voice (see attached singing unit)</b>			
<b>Timeline: September to October</b>			
<p><b>1.1E:</b> Imitate melodic patterns</p> <p><b>1.2 E:</b> Sing on pitch within the appropriate singing range</p> <p><b>1.3E:</b> Sing on pitch in rhythm while applying a steady beat</p> <p><b>1.4E:</b> Sing demonstrating proper posture and breathing</p> <p><b>1.5E:</b> Sing demonstrating proper vocal technique</p> <p><b>1.6E:</b> Sing expressively utilizing dynamics and phrasing</p> <p><b>1.7E:</b> Sing call and response</p> <p><b>1.8E:</b> Singing ostinati with songs</p> <p><b>1.9E:</b> Sing in groups in response to gestures of a conductor</p> <p><b>1.10E:</b> Sing rounds</p> <p><b>1.11E:</b> Sing partner songs</p> <p><b>1.12E:</b> Sing music in 2 and 3 Parts</p> <p><b>1.13E:</b> Sing in groups and blending vocal timbres</p> <p><b>1.14E:</b> Sing a repertoire of songs representing different genres, styles and languages</p> <p><b>1.15E:</b> Sing expressively with phrasing, dynamics and stylistic interpretation</p>	<p>Training and refinement of basic vocal techniques to enhance performance.</p> <p>Physiological changes of the voice during adolescence affect the voice.</p> <p>Singing in a choir is different from singing as a soloist.</p> <p>Choirs must listen to each other as they sing to ensure blend and balance.</p> <p>Expression of a song is demonstrated through the use of tone and changes in vowels and dynamics.</p> <p><b>CONCEPTS:</b></p> <ul style="list-style-type: none"> <li>• Singing/rehearsing 2-part music of beginner level difficulty</li> <li>• Posture</li> <li>• Breathing</li> <li>• Solfege syllables, staff, clefs, scales and key signatures</li> <li>• Tone quality</li> <li>• Intonation</li> </ul>	<ul style="list-style-type: none"> <li>• What are the essentials of good posture for singing?</li> <li>• What are the physical characteristics necessary for good breath support?</li> <li>• What is Solfege and how do we use it to read music?</li> <li>• Why is sight reading important to musicians?</li> <li>• What is an open, relaxed vocal sound?</li> <li>• What vocal changes occur during teenage years?</li> <li>• What does proper breathing look/feel like? Why is it important?</li> <li>• How does vowel formation and placement change the tone of a song?</li> <li>• What is good intonation and how is it achieved?</li> <li>• How are balance and blend achieved within a choir?</li> <li>• How do dynamics affect the mood of a song?</li> <li>• How do expressive elements communicate an idea and/or feeling in a song?</li> </ul>	<ul style="list-style-type: none"> <li>• Exhibit proper breathing while singing</li> <li>• Sing with open throat</li> <li>• Relaxed jaw</li> <li>• Listen and identify various tone colors</li> <li>• Produce lighter and darker, fatter and thinner vocal qualities through shaping lips and mouth</li> <li>• Identify their voice part by range sung and follow that part in a score</li> <li>• Perform with proper balance within a choir</li> <li>• Perform with proper blend within a choir</li> <li>• Shape vowels correctly while singing</li> <li>• Successfully sing 2 part music of beginner difficulty, while incorporating all the music skills and techniques studied</li> </ul>

<p><b>5.1E:</b>Identify and define standard notation symbols</p> <p><b>5.2E:</b> Read rhythmic notation</p> <p><b>5.3:</b> Read melodic notation</p> <p><b>5.4E:</b> Read a single line of an instrumental or vocal part</p> <p><b>5.5E:</b> Notate symbols and terms for meter and rhythm</p> <p><b>5.6E:</b>Notate symbols for pitch</p> <p><b>5.7E:</b>Notate symbols and terms referring to dynamics, tempo and articulation</p> <p><b>5.8E:</b> Read an instrumental or vocal score</p> <p><b>5.9E:</b> Read unfamiliar music with tonal and rhythmic accuracy</p> <p><b>5.10E:</b> Read simple melodies in 2 or more clefs</p> <p><b>6.3E:</b> Identify and classify voices by range and quality</p> <p><b>6.7E:</b> Identify the elements of music within a musical composition</p> <p><b>7.1E:</b> Express personal preferences for specific musical styles</p> <p><b>7.2E:</b> Identify ways for evaluating compositions and performances</p> <p><b>7.3E:</b> Explain personal music preferences using appropriate terminology</p> <p><b>7.4E:</b> Discuss and evaluate the relationship between music and human emotions</p> <p><b>7.5E:</b> Develop and apply criteria for evaluating compositions</p>	<ul style="list-style-type: none"> <li>• Balance/blend</li> <li>• Dynamics</li> <li>• Pop styles</li> </ul>		
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<p>and performances</p> <p><b>7.6E:</b> Develop criteria for evaluating the quality and effectiveness of music performances and compositions and apply the criteria in their personal listening and performing</p> <p><b>7.7E:</b> Critically evaluate one's own musical creations</p> <p><b>7.8E:</b> Critically evaluate the compositions, arrangements, and improvisations of others by applying specific criteria appropriate for the style of the music and offer constructive suggestions for improvement</p> <p><b>8.1E:</b> Identify, compare and contrast the roles of creators, performers and consumers in the production and presentation of the arts including music</p> <p><b>8.3E:</b> Illustrate ways in which the principles and subject matter of other curricular areas are interrelated to music</p> <p><b>8.4E:</b> Compare and contrast terms common between the arts and other curricular areas (e.g., texture, color, form)</p> <p><b>8.5E:</b> Compare and contrast artistic themes across cultures, history and multiple media</p> <p><b>9.1E:</b> Identify and describe the roles of musicians in various historical periods, cultures, genre and styles</p> <p><b>9.2E:</b> Listen to music from various periods and diverse cultures by genre or style</p>			
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<b>Unit Two: Many Voices But One Sound - Singing Together as a Chorus</b>			
<b>Timeline: November to December</b>			
<p><b>1.1E:</b> Imitate melodic patterns</p> <p><b>1.2E:</b> Imitate melodic patterns</p> <p><b>1.3E:</b> Sing on pitch in rhythm while applying a steady beat</p> <p><b>1.4E:</b> Sing demonstrating proper posture and breathing</p> <p><b>1.5E:</b> Sing demonstrating proper vocal technique</p> <p><b>1.6E:</b> Sing expressively utilizing dynamics and phrasing</p> <p><b>1.7E:</b> Sing call and response</p> <p><b>1.8E:</b> Singing ostinati with songs</p> <p><b>1.9E:</b> Sing in groups in response to gestures of a conductor</p> <p><b>1.10E:</b> Sing rounds</p> <p><b>1.11E:</b> Sing partner songs</p> <p><b>1.12E:</b> Sing music in 2 and 3 Parts</p> <p><b>1.13:</b> Sing in groups and blending vocal timbres</p> <p><b>1.14E:</b> Sing a repertoire of songs representing different genres, styles and languages</p> <p><b>1.15E:</b> Sing expressively with phrasing, dynamics and stylistic interpretation</p> <p><b>5.1E:</b> Identify and define standard notation symbols</p> <p><b>5.2E:</b> Read rhythmic notation</p> <p><b>5.3E:</b> Read melodic notation</p>	<p>Students will listen to and perform music and music from cultures around the world, and will gain insight into the cultures and people of these nations.</p> <p>Understanding and refining basic vocal techniques can enhance vocal performance.</p> <p>Physiological changes during adolescence can affect the voice.</p> <p>Singing in a choir is different from singing as a soloist.</p> <p>Choirs must listen to each other as they sing to ensure blend and balance.</p> <p>Expression of a song is demonstrated through the use of tone and changes in vowels and dynamics</p> <p><b>CONCEPTS:</b></p> <ul style="list-style-type: none"> <li>• Rehearsing 4-8 part music of advanced difficulty</li> <li>• Posture review</li> <li>• Breathing review</li> <li>• Tone Quality</li> <li>• Voice Classification</li> <li>• Intonation</li> <li>• Balance/Blend</li> <li>• Dynamics</li> <li>• Review, unison vowels.</li> <li>• Intervals</li> <li>• Analyzing Text</li> <li>• Review of phrasing and</li> </ul>	<ul style="list-style-type: none"> <li>• What are the essentials of good posture for singing?</li> <li>• What are the physical characteristics necessary for good breath support?</li> <li>• What is an open, relaxed vocal sound?</li> <li>• What does proper breathing look/feel like?</li> <li>• Why is it important to breathe correctly while singing?</li> <li>• How are balance and blend achieved within a choir?</li> <li>• How do dynamics affect the mood of a song?</li> <li>• How do expressive elements communicate an idea and/or feeling in a song?</li> <li>• How does vowel formation and placement change the tone of a song?</li> <li>• What are the voice part classifications that occur as our voices mature?</li> <li>• What is good intonation and how do we achieve it?</li> <li>• How do we deliver a text to its best advantage?</li> <li>• What is Solfege and how do we use it to read music?</li> <li>• Why is sight reading important to musicians?</li> <li>• What are the differences and similarities of Slave songs from Africa, America, and</li> </ul>	<ul style="list-style-type: none"> <li>• The teacher will listen to the students' perform 15-20 measures of musical selections in groups of 4-6 students. The groups will have the opportunity to select a section of the piece that they are comfortable with. The teacher will also have each student sing the selection individually. Rubric A will be used to assess how the student's performances.</li> <li>• Singing assessments on sight-reading in the keys of C, G, and D major with Solfege, using rubric B.</li> <li>• Written assessments on identifying notes both in the Treble and Bass clefs, and music vocabulary and symbols.</li> <li>• Students will complete journal reflections on the music of the different cultures, either by writing their own thoughts, or by answering specific questions posed by the teacher.</li> </ul>

<p><b>5.4E:</b> Read a single line of an instrumental or vocal part</p> <p><b>5.5E:</b> Notate symbols and terms for meter and rhythm</p> <p><b>5.6E:</b> Notate symbols for pitch</p> <p><b>5.7E:</b> Notate symbols and terms referring to dynamics, tempo and Articulation</p> <p><b>5.8E:</b> Read an instrumental or vocal score</p> <p><b>5.9E:</b> Read unfamiliar music with tonal and rhythmic accuracy</p> <p><b>5.10E:</b> Read simple melodies in 2 or more clefs</p> <p><b>6.3E:</b> Identify and classify voices by range and quality</p> <p><b>6.6E:</b> Express through verbal and non-verbal means various styles/genres of music</p> <p><b>6.7E:</b> Identify the elements of music within a musical composition</p> <p><b>8.4E:</b> Compare and contrast terms common between the arts and other curricular areas (e.g., texture, color, form)</p> <p><b>8.5E:</b> Compare and contrast artistic themes across cultures, history and multiple media</p> <p><b>9.1E:</b> Identify and describe the roles of musicians in various historical periods, cultures, genre and styles</p> <p><b>9.2E:</b> Listen to music from various periods and diverse cultures by genre or style</p> <p><b>9.3E:</b> Describe how elements of music are used in various historical periods, cultures, genres and Styles</p>	<p>shaping lines.</p> <ul style="list-style-type: none"> <li>• Review of enunciation and articulation.</li> <li>• Solfege syllables, staff, clefs, scales, and key signatures.</li> <li>• Pop, classical, gospel styles</li> <li>• Song of Slavery from Africa, America and Europe</li> <li>• Music of different Continents</li> </ul>	<p>Europe?</p> <ul style="list-style-type: none"> <li>• What are some distinguishing characteristics of music throughout our world?</li> <li>• How can we connect music from different countries to music in our lives?</li> </ul>	
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<p><b>9.5E:</b> Classify and describe Distinguishing characteristics of representative music genres and styles from various cultures and historical periods</p> <p><b>9.6E:</b> Identify and explain the characteristics that cause a musical work to be considered culturally, historically and/or geographically significant</p>			
<p><b>Unit Three: Sight Reading (see attached Sight Reading unit)</b>  <b>Timeline: January</b></p>			
<p><b>1.2E</b> Sing on pitch within the appropriate singing range</p> <p><b>1.4E</b> Sing demonstrating proper posture and breathing</p> <p><b>1.5E</b> Sing demonstrating proper vocal technique</p> <p><b>5.1E</b> Identify and define standard notation symbols</p> <p><b>5.3E</b> Read melodic notation</p> <p><b>5.4E</b> Read a single line of an instrumental or vocal part</p> <p><b>5.5E</b> Notate symbols and terms for meter and rhythm</p> <p><b>5.6E</b> Notate symbols for pitch</p> <p><b>5.9E</b> Read unfamiliar music with tonal and rhythmic accuracy</p>	<p>Written music is a language that has symbols and rules that enable a musician or performer to maintain accurate communication over time and distance.</p> <p>Written music is open to individual interpretation.</p> <p>Music has a universal written language.</p> <p><b>CONCEPTS:</b></p> <ul style="list-style-type: none"> <li>• Reading and notating music</li> <li>• Acronyms for reading notes on the treble clef staff</li> <li>• Acronyms for reading notes on the bass clef staff</li> <li>• Scale</li> <li>• Solfege syllables</li> <li>• C major scale</li> <li>• Hand signs</li> </ul>	<ul style="list-style-type: none"> <li>• What is solfege and how do we use it to read music?</li> <li>• Why is sight reading important to musicians?</li> <li>• Why learn to read and notate music?</li> <li>• When is the best time to learn notation? According to whom?</li> <li>• How essential is written music to the process of composition?</li> </ul> <p><b>Learning Targets:</b></p> <ul style="list-style-type: none"> <li>• Recognize a scale as a series of notes</li> <li>• Sing the C major scale using “do re mi” etc.</li> <li>• Identify each step of the major scale using do, re, mi, fa, so, la, ti, do</li> <li>• Sing the major scale with accuracy</li> <li>• Demonstrate the use of hand-signs</li> <li>• Demonstrate proper singing posture, breath control and support</li> </ul>	<ul style="list-style-type: none"> <li>• Informal assessment of student’s performance</li> <li>• Use of questioning during whole group instruction</li> <li>• Exit tickets where students are asked to complete exit tickets as to their grasp of the enduring understandings, essential questions, and objectives of each lesson.</li> <li>• Singing assessments on sight-reading in the key of C major (+ relative minors) with Solfege, using rubric B.</li> <li>• Written assessments on identifying notes both in the Treble and Bass clefs, and music vocabulary and symbols</li> </ul>

<b>Unit Four: Performing as a Professional Chorus</b> <b>Timeline: February through March</b>			
<p>1.1E: Imitate melodic patterns</p> <p>1.2E: Sing on pitch within the appropriate singing range</p> <p>1.3E: Sing on pitch in rhythm while applying a steady beat</p> <p>1.4E: Sing demonstrating proper posture and breathing</p> <p>1.5E: Sing demonstrating proper vocal technique</p> <p>1.6E: Sing expressively utilizing dynamics and phrasing</p> <p>1.7E: Sing call and response</p> <p>1.8E: Singing ostinati with songs</p> <p>1.9E: Sing in groups in response to gestures of a conductor</p> <p>1.10E: Sing rounds</p> <p>1.11E: Sing partner songs</p> <p>1.12E: Sing music in 2 and 3 parts</p> <p>1.13E: Sing in groups and blending vocal timbres</p> <p>1.14E: Sing a repertoire of songs representing different genres, styles and languages</p> <p>1.15E: Sing expressively with phrasing, dynamics and stylistic interpretation</p> <p>3.1E: Improvise rhythmically with voice or on instrument</p> <p>3.2E: Improvise ostinato accompaniments</p>	<p>Students will listen to and perform music and music from cultures around the world, and will gain insight into the cultures and people of these nations.</p> <p>Internalization of pitch discretion and melody can improve vocal intonation.</p> <p>Students will critique performances by using constructive criticism</p> <p>Active participation in the choir leads to understanding of vocal applications.</p> <p>Composing is a form of communication and provides a method of self expression.</p> <p>Composing rhythms and songs provides a deeper understanding of the form and structure of music and reflect the time period and culture of the composer.</p> <p>Improvising with music and movement enhances the development of creativity.</p> <p>Composing and improvising music can help people work together and learn to respect and value the work of others around them.</p> <p><b>CONCEPTS:</b></p> <ul style="list-style-type: none"> <li>Rehearsing 4-8 part music</li> <li>Internalization of pitch</li> </ul>	<ul style="list-style-type: none"> <li>What results from the lack of internalizing pitch direction?</li> <li>What is musical articulation and how does it affect the music?</li> <li>What does an excellent choir look like?</li> <li>What is excellent performance behavior?</li> <li>What are the elements of proper singing posture when performing?</li> <li>What does a successful choir performance <i>look</i> like?</li> <li>What do you want the audience to feel when you are performing?</li> <li>What manners are expected by a performer?</li> <li>How do facial expressions convey the mood of the text?</li> <li>What s the role of the conductor and what must the singer do to ensure they are following the conductor?</li> <li>What are some similarities between Native American and American Folk Music?</li> <li>What are the different types of instruments and voices used in traditional African Music?</li> </ul>	<ul style="list-style-type: none"> <li>The teacher will listen to the students' perform 15-20 measures of musical selections in groups of 4-6 students. The groups will have the opportunity to select a section of the piece that they are comfortable with. The teacher will also have each student sing the selection individually. Rubric A will be used to assess how the student's performances.</li> <li>Singing assessments on sight-reading in the keys of A and E and B major(+ relative minors) with Solfege, using rubric B.</li> <li>Written assessments on identifying notes both in the Treble and Bass clefs, and music vocabulary and symbols.</li> <li>Teacher will video tape the choir's performance at a rehearsal two weeks prior to concert, and then again at the concert. He/she will then watch the performances, and evaluate each student using the rubric C.</li> <li>Students will complete journal reflections on the music of the different cultures, either by writing their own thoughts, or by</li> </ul>

<p><b>3.3E:</b> Improvise unaccompanied melodies</p> <p><b>3.4E:</b> Improvise melodic embellishments on given melodies in various tonalities</p> <p><b>3.5E:</b> Improvise rhythmic variations on given melodies</p> <p><b>3.6E:</b> Improvise melodic variations</p> <p><b>3.7E:</b> Improvise melodies over basic chord progressions</p> <p><b>3.8E:</b> Improvise melodies over given rhythm and tonal context</p> <p><b>3.9E:</b> Improvise basic harmonic accompaniment or bass line to a given melody</p> <p><b>3.10E:</b> Improvise melodies over given rhythm and harmonic context consistent to the styles</p> <p><b>4.1E:</b> Compose short songs and instrumental pieces</p> <p><b>4.2E:</b> Arrange short songs and/or instrumental pieces</p> <p><b>4.3E:</b> Utilize standard written notation in composition of short Songs</p> <p><b>4.4E:</b> Utilize compositional technology</p> <p><b>4.5E:</b> Manipulate a variety of traditional, nontraditional and electronically produced sounds while creating or arranging</p> <p><b>4.6E:</b> Organize the elements of music into compositions which are unified and varied</p> <p><b>5.1E:</b> Identify and define standard notation symbols</p> <p><b>5.2E:</b> Read rhythmic notation</p> <p><b>5.3E:</b> Read melodic notation</p>	<p>discretion and melody can improve vocal intonation.</p> <ul style="list-style-type: none"> <li>• Students will critique performances by using constructive criticism</li> <li>• Active participation in the choir leads to understanding of vocal applications.</li> <li>• African Music</li> <li>• Composing is a form of communication and provides a method of self expression.</li> <li>• Composing rhythms and songs provides a deeper understanding of the form and structure of music and reflect the time period and culture of the composer.</li> <li>• Improvising with music and movement enhances the development of creativity.</li> <li>• Composing and improvising music can help people work together and learn to respect and value the work of others around them.</li> <li>• Perform music from various countries across the globe</li> </ul>	<ul style="list-style-type: none"> <li>• Does a composer’s music always reflect what type of person the composer is?</li> <li>• How can you use technology to compose music?</li> <li>• How are different sections combined to create musical compositions?</li> <li>• What kinds of elements can you use in a composition that reflects your culture?</li> <li>• How does music of today compare with music of the past?</li> <li>• How can we change this song to give it a different mood?</li> <li>• What is the value of creating music?</li> <li>• What are some distinguishing characteristics of music throughout our world?</li> <li>• Why is it important to explore different styles and genres of music?</li> </ul>	<p>answering specific questions posed by the teacher.</p>
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<p><b>5.4E</b> Read a single line of an instrumental or vocal part</p> <p><b>5.5E:</b> Notate symbols and terms for meter and rhythm</p> <p><b>5.6E:</b> Notate symbols for pitch</p> <p><b>5.7E:</b> Notate symbols and terms referring to dynamics, tempo and articulation</p> <p><b>5.8E:</b> Read an instrumental or vocal score</p> <p><b>5.9E:</b> Read unfamiliar music with tonal and rhythmic accuracy</p> <p><b>5.10E:</b> Read simple melodies in 2 or more clefs</p> <p><b>6.3E:</b> Identify and classify voices by range and quality</p> <p><b>6.7E:</b> Identify the elements of music within a musical composition</p> <p><b>7.1E:</b> Express personal preferences for specific musical styles</p> <p><b>7.2E:</b> Identify ways for evaluating compositions and performances</p> <p><b>7.3E:</b> Explain personal music preferences using appropriate terminology</p> <p><b>7.4E:</b> Discuss and evaluate the relationship between music and human emotions</p> <p><b>7.5E:</b> Develop and apply criteria for evaluating compositions and Performances</p> <p><b>7.6E:</b> Develop criteria for evaluating the quality and effectiveness of music performances and compositions and apply the criteria in their personal listening and performing</p>			
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<p><b>7.7E:</b> Critically evaluate one's own musical creations</p> <p><b>7.8E:</b> Critically evaluate the compositions, arrangements, and improvisations of others by applying specific criteria appropriate for the style of the music and offer constructive suggestions for improvement</p> <p><b>8.1E:</b> Identify, compare and contrast the roles of creators, performers and consumers in the production and presentation of the arts including music</p> <p><b>8.3E:</b> Illustrate ways in which the principles and subject matter of other curricular areas are interrelated to music</p> <p><b>8.4E:</b> Compare and contrast terms common between the arts and other curricular areas (e.g., texture, color, form)</p> <p><b>8.5E:</b> Compare and contrast artistic themes across cultures, history and multiple media</p> <p><b>9.1E:</b> Identify and describe the roles of musicians in various historical periods, cultures, genre and styles</p> <p><b>9.2E:</b> Listen to music from various periods and diverse cultures by genre or style</p>			
<p><b>Unit Five: Evaluation and Improving Performance</b>  <b>Timeline: April to June</b></p>			
<p><b>1.1E:</b> Imitate melodic patterns</p> <p><b>1.2E:</b> Sing on pitch within the appropriate singing range</p> <p><b>1.3E:</b> Sing on pitch in rhythm while applying a steady beat</p> <p><b>1.4E:</b> Sing demonstrating proper posture and breathing</p> <p><b>1.5E:</b> Sing demonstrating proper vocal technique</p>	<p>Listening to and performing music from cultures around the world allows you to gain insight into the cultures and people of the nations</p> <p>Evaluation and self-evaluation is a critical component for improving and appreciating the aesthetics of a performance</p>	<ul style="list-style-type: none"> <li>• How does self-evaluation improve one's own performance?</li> <li>• How can evaluating a music performance help to improve your own performance?</li> <li>• What is the value of creating and observing works of music?</li> </ul>	<ul style="list-style-type: none"> <li>• The teacher will listen to the students' perform 15-20 measures of musical selections in groups of 4-6 students. The groups will have the opportunity to select a section of the piece that they are comfortable with. The teacher will also have each student sing the</li> </ul>

<p><b>1.6E:</b> Sing expressively utilizing dynamics and phrasing</p> <p><b>1.7E:</b> Sing call and response</p> <p><b>1.8E:</b> Singing ostinati with songs</p> <p><b>1.9E:</b> Sing in groups in response to gestures of a conductor</p> <p><b>1.10E:</b> Sing rounds</p> <p><b>1.11E:</b> Sing partner songs</p> <p><b>1.12E:</b> Sing music in 2 and 3 parts</p> <p><b>1.13E:</b> Sing in groups and blending vocal timbres</p> <p><b>1.14E:</b> Sing a repertoire of songs representing different genres, styles and languages</p> <p><b>1.15E:</b> Sing expressively with phrasing, dynamics and stylistic interpretation</p> <p><b>3.1E:</b> Improvise rhythmically with voice or on instrument</p> <p><b>3.2E:</b> Improvise ostinato accompaniments</p> <p><b>3.3E:</b> Improvise unaccompanied Melodies</p> <p><b>3.4E:</b> Improvise melodic embellishments on given melodies in various tonalities</p> <p><b>3.5E:</b> Improvise rhythmic variations on given melodies</p> <p><b>3.6E:</b> Improvise melodic variations</p> <p><b>3.7E:</b> Improvise melodies over basic chord progressions</p> <p><b>3.8E:</b> Improvise melodies over given rhythm and tonal</p>	<p>Participating in and observing music and its performance is enriching spiritually, emotionally and cognitively</p> <p>Listening to and analyzing music helps to develop an appreciation of how music relates to a person’s environment and culture</p> <p>Variations in melody, rhythm, tempo and dynamics, instruments help to define music</p> <p>Comparing and contrasting various styles of music can deepen the understanding of how music styles are collaborative.</p> <p><u>Concepts:</u></p> <ul style="list-style-type: none"> <li>• Rehearsing 4-8 part music of advanced difficulty</li> <li>• Continued study of music reading, Solfege syllables, scales, and key signatures.</li> <li>• Music careers</li> <li>• Music in our world</li> <li>• Consumer awareness</li> <li>• Performance goals</li> <li>• Critique/evaluation</li> <li>• Listening</li> <li>• Compare/Contrast</li> <li>• Patterns</li> <li>• Latin-American Music(Cinco de Mayo)</li> </ul>	<ul style="list-style-type: none"> <li>• How does music help you to be a better person?</li> <li>• How does music help you in other discipline areas?</li> <li>• What are some ways that music can help people?</li> <li>• What are some distinguishing characteristics of Latin American music?</li> <li>• How can we connect Latin American music to music in our lives?</li> <li>• How can a person critique a piece of music in a respectful way?</li> <li>• What is the difference between listening for enjoyment and listening to analyze?</li> <li>• How can empathy for another culture be developed by listening to its music?</li> <li>• How do variations in music elements affect the mood of a piece?</li> <li>• What do we need to know about music from different parts of our world?</li> </ul>	<p>selection individually. Rubric A will be used to assess how the student’s performances.</p> <ul style="list-style-type: none"> <li>• Singing assessments on sight-reading in ALL MAJOR/MINOR KEYS with Solfege, using rubric B.</li> <li>• Written assessments on identifying notes both in the Treble and Bass clefs, Key signatures, music vocabulary and musical symbols.</li> <li>• Teacher will video tape the choir’s performance at a rehearsal two weeks prior to concert, and then again at the concert. He/she will then watch the performances, and evaluate each student using rubric C.</li> <li>• Students will complete journal reflections on the music of the different cultures, either by writing their own thoughts, or by answering specific questions posed by the teacher.</li> </ul>
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<p>context</p> <p><b>3.9E:</b> Improvise basic Harmonic accompaniment or bass line to a given melody</p> <p><b>3.10E:</b> Improvise melodies over given rhythm and harmonic context consistent to the styles</p> <p><b>5.1E:</b> Identify and define standard notation symbols</p> <p><b>5.3E:</b> Read melodic notation</p> <p><b>5.4E:</b> Read a single line of an instrumental or vocal part</p> <p><b>5.5E:</b> Notate symbols and terms for meter and rhythm</p> <p><b>5.6E:</b> Notate symbols for pitch</p> <p><b>5.7E:</b> Notate symbols and terms referring to dynamics, tempo and articulation</p> <p><b>5.8E:</b> Read an instrumental or vocal score</p> <p><b>5.9E:</b> Read unfamiliar music with tonal and rhythmic accuracy</p> <p><b>5.10E:</b> Read simple melodies in 2 or more clefs</p> <p><b>7.1E:</b> Express personal preferences for specific musical styles</p> <p><b>7.2E:</b> Identify ways for evaluating compositions and performances</p> <p><b>7.3E:</b> Explain personal music preferences using appropriate Terminology</p> <p><b>7.4E:</b> Discuss and evaluate the relationship between music and human emotions</p>			
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<p><b>7.5E:</b> Develop and apply criteria for evaluating compositions and Performances</p> <p><b>7.6E:</b> Develop criteria for evaluating the quality and effectiveness of music performances and compositions and apply the criteria in their personal listening and performing</p> <p><b>7.7E:</b> Critically evaluate one's own musical creations</p> <p><b>7.8E:</b> Critically evaluate the compositions, arrangements, and improvisations of others by applying specific criteria appropriate for the style of the music and offer constructive suggestions for improvement</p> <p><b>8.1E:</b> Identify, compare and contrast the roles of creators, performers and consumers in the production and presentation of the arts including music</p> <p><b>8.3E:</b> Illustrate ways in which the principles and subject matter of other curricular areas are interrelated to music</p> <p><b>8.4E:</b> Compare and contrast terms common between the arts and other curricular areas (e.g., texture, color, form)</p> <p><b>8.5E:</b> Compare and contrast artistic themes across cultures, history and multiple media</p> <p><b>9.1E:</b> Identify and describe the roles of musicians in various historical periods, cultures, genre and styles</p> <p><b>9.2E:</b> Listen to music from various periods and diverse cultures by genre or style</p>			
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# Curriculum Framework for Visual Arts

School: Newark Charter

Curricular Tool: \_\_\_\_\_

Course: Art Appreciation

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
<b>Unit One: Creating and Understanding Art</b>			
<b>Timeline : 8-10 classes</b>			
<p><b>1.4E</b> Demonstrate how a single medium or technique can be used to create multiple effects in works of art</p> <p><b>1.5E</b> Compare and contrast the different effects created by various two-dimensional and three-dimensional works of art</p> <p><b>1.6 E</b> Identify different media, techniques and processes that are used to create works of art</p> <p><b>1.7 E</b> Describe how media and techniques are used to create two-dimensional and three-dimensional works of art</p> <p><b>2.1E</b> Identify the elements of art</p> <p><b>2.2E</b> Select and use the elements of art in works of art</p> <p><b>2.3E</b> Identify the principles of design</p> <p><b>2.4E</b> Analyze the elements of art</p> <p><b>2.5E</b> Evaluate works of art in terms of structure and function</p> <p><b>3.2E</b> Integrate a variety of sources for subject matter, symbols and/ or ideas which best communicate an intended meaning in works of art</p>	<p>Artists create works of art employing both conscious and intuitive thought.</p> <p>Artists make thoughtful choices in creating works of art.</p> <p>Every work of art has a point of view.</p> <p>Form and function may or may not be related one to the other.</p> <p>Art is a form of expression that employs a system of visual symbols.</p> <p>Art may be created solely to fulfill a need to create.</p> <p>Art is a universal symbol system that transcends language barriers.</p>	<p>Why do artists select one medium over another?</p> <p>To what extent is a work of art dependent upon the point of view of the artist?</p> <p>To what extent is a work of art dependent upon the point of view of the viewer?</p> <p>How and why is art used as a vehicle for communication?</p> <p>To what extent does good design integrate form with function?</p> <p>What is art?</p> <p>How does the use of specific symbols influence the meaning of a work of art?</p> <p>What makes art more or less authentic?</p> <p><b><u>Learning Targets:</u></b> Explain how the principles of art are used to organize the elements of art</p> <p>Identify the elements of art Identify the difference between fine</p>	<ul style="list-style-type: none"> <li>Participate in a Web Museum Tour and take particular attention to paintings of people. Select a painting of a person and write several paragraphs about that person using your imagination. Try to describe what the person is feeling or thinking about. Imagine what it might be like to live during the period of the painting. Include the organization of the painting as it relates to the elements of art.</li> <li>To understand applied arts, create a functional piece of art work from clay. By your choice of decoration, make the piece pleasing to the viewer.</li> <li>Choose five works of art from the book that represent different artists, time periods, and subject. Record the credit line information of each in a journal and make a thumbnail sketch.</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
<p><b>3.3E</b> Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art</p> <p><b>3.6E</b> Analyze how the use of subject matter, symbols and ideas are used in works of art</p>		<p>arts and applied arts</p> <p>Demonstrate how a design chart can be used to identify the elements and principles in a work of art</p> <p>Name and describe the three basic ingredients in paint</p> <p>Describe the four basic printmaking methods</p> <p>Name and describe the four major techniques use to create sculpture</p> <p>Identify the four steps in the process of art criticism</p> <p>Identify and discuss three major aesthetic theories Identify and discuss the four steps in the process of art history</p> <p>Use the four steps of the art history operations to gather information about a work of art</p>	<p>Determine the reason each was created (from the text) and record your answer.</p> <ul style="list-style-type: none"> <li>• Select a painting from the Web Museum Tour and write an art criticism about it using describe, analyze, interpret, and judge.</li> <li>• To understand color, make your own creative color wheel using the primary secondary and tertiary colors.</li> <li>• Make a simple one point perspective drawing to understand the difference between shape and form.</li> <li>• Create a series of 5 thumbnail sketches or take 5 digital pictures from your environment (indoors and out) and explain your choices in writing.</li> <li>• Find examples of architectural construction in your school or neighborhood.</li> </ul>

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<b>Unit Two: Art of Early Civilizations</b> <b>Timeline: 7-9 classes</b>			
<p><b>2.1E</b> Identify the elements of art</p> <p><b>2.3E</b> Identify the principles of design</p> <p><b>2.4E</b> Analyze the elements of art</p> <p><b>2.5E</b> Evaluate works of art in terms of structure and function</p> <p><b>2.6E</b> Analyze the principles of design</p> <p><b>2.10E</b> Analyze how the elements of art and principles of design applied through various media, techniques and processes produce different effects</p> <p><b>3.1E</b> Identify subject matter, symbols and ideas in works of art</p> <p><b>3.2E</b> Integrate a variety of sources for subject matter, symbols and/ or ideas which best communicate an intended meaning in works of art</p> <p><b>3.3E</b> Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art</p> <p><b>3.5E</b> Describe and differentiate the origins of specific subject matter, symbols and ideas in works of art</p> <p><b>3.6E</b> Analyze how the use of subject matter, symbols and ideas are used in works of art</p> <p><b>4.1E</b> Identify historical and cultural characteristics of works of art</p> <p><b>4.2E</b> Describe how the arts and artists influence</p>	<p>Art is a form of expression that employs a system of visual symbols.</p> <p>Art may be created solely to fulfill a need to create.</p> <p>Art is a universal symbol system that transcends language barriers.</p> <p>Art draws upon all aspects of human experience.</p> <p>The process of choosing and evaluating subject matter, symbols and ideas may be deliberate or intuitive.</p> <p>Art has been created by all peoples, in all times and in all places.</p> <p>Art preserves and depicts history in ways words cannot.</p> <p>Art celebrates the unique characteristics of all cultures.</p> <p>Subject matter, symbols and ideas are all rooted in culture.</p> <p>Natural resources have influenced the creation of indigenous art forms.</p> <p>Timeless works of art are</p>	<p>How and why is art used as a vehicle for communication?</p> <p>What makes art more or less authentic?</p> <p>To what extent does history reflect upon and have an influence on art?</p> <p>To what extent does art reflect upon and have an influence on history?</p> <p>What makes some works of art great?</p> <p>When does a work of art have merit?</p> <p>To what extent is it adequate or appropriate to say “I like it” or “I don’t like it” when discussing the merit of a work of art?</p> <p><b><u>Learning Targets:</u></b> Identify and discuss the four steps in the process of art history</p> <p>Use the four steps of the art history operations to gather information about a work of art</p> <p>Explain why prehistoric cave paintings may have originated</p> <p>Explain how prehistoric paintings survived.</p> <p>Name the different civilizations that were born, flourished, and declined in</p>	<ul style="list-style-type: none"> <li>Imagine you are at an archaeology site and have discovered an artifact similar to one pictured on page 126 &amp; 130. Write notes of what you have found and prepare a report to a museum curator.</li> <li>Have one a few students place their possessions on a table for examination. Study these artifacts and make notes, sketches and interpretations. Present finding to the class.</li> <li>Using fig 6.17 depicting people in line for an audience with the king as a resource, create a drawing of students in line for a sports examination at the nurses office.</li> <li>Model an animal in clay using a geometric form. Add head tail and large features as well as details and textures.</li> <li>Research hieroglyphics and design a personal cartouche. Exhibit your designs in class.</li> </ul>

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<p>each other across history and cultures</p> <p><b>4.3E</b> Compare the purpose of works of art and design in history and cultures</p> <p><b>4.4E</b> Speculate on how history and culture give meaning to a work of art</p> <p><b>4.5E</b> Describe and differentiate the roles of artists in society across history and cultures</p> <p><b>4.6E</b> Describe how history and cultures influence the visual arts</p> <p><b>4.7E</b> Describe how the visual arts influence history and cultures</p> <p><b>5.4E</b> Analyze works of art to speculate why they were created</p> <p><b>5.5E</b> Evaluate the artist's intent and effectiveness in communicating ideas and emotions in works of art</p> <p><b>5.6E</b> Apply visual arts vocabulary when reflecting upon and assessing works of art</p>	<p>deemed important for a number and variety of reasons.</p> <p>Reflection, assessment and refinement are key steps in the process of creating art.</p>	<p>Mesopotamia beginning around 4500<sub>BC</sub></p> <p>Name the three major historical periods of ancient Egypt</p> <p>Explain the relationship of religion to the development of the pyramids</p> <p>Discuss the uses of sculpture, relief sculpture, and painting in ancient Egypt</p> <p>Explain the strict set of rules imposed on Egyptian artists</p>	
<p><b>Unit Three: Art of Rising Civilizations</b>  <b>Timeline: 7 classes</b></p>			
<p><b>2.4E</b> Analyze the elements of art</p> <p><b>2.5E</b> Evaluate works of art in terms of structure and function</p> <p><b>3.1E</b> Identify subject matter, symbols and ideas in works of art</p>	<p>Art is a form of expression that employs a system of visual symbols.</p> <p>Art may be created solely to fulfill a need to create.</p> <p>Art is a universal symbol</p>	<p>How and why is art used as a vehicle for communication?  What makes art more or less authentic?</p> <p>To what extent does history reflect upon and have an influence on art?</p>	<ul style="list-style-type: none"> <li>• Browse the Classical section of North Carolina Museum of Art Web and choose one Greek or Roman piece in the collection. After examining the artwork, describe and analyze the</li> </ul>

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<p><b>3.3E</b> Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art</p> <p><b>3.6E</b> Analyze how the use of subject matter, symbols and ideas are used in works of art</p> <p><b>4.1E</b> Identify historical and cultural characteristics of works of art</p> <p><b>4.2E</b> Describe how the arts and artists influence each other across history and cultures</p> <p><b>4.3E</b> Compare the purpose of works of art and design in history and cultures</p> <p><b>4.4E</b> Speculate on how history and culture give meaning to a work of art</p> <p><b>4.5E</b> Describe and differentiate the roles of artists in society across history and cultures</p> <p><b>4.6E</b> Describe how history and cultures influence the visual arts</p> <p><b>4.7E</b> Describe how the visual arts influence history and cultures</p> <p><b>5.1E</b> Discuss how individual experiences influence personal works of art</p> <p><b>5.2E</b> Identify ways the visual arts are used as communication</p> <p><b>5.3E</b> Describe personal responses to selected works of art</p>	<p>system that transcends language barriers.</p> <p>Art draws upon all aspects of human experience.</p> <p>The process of choosing and evaluating subject matter, symbols and ideas may be deliberate or intuitive.</p> <p>Art has been created by all peoples, in all times and in all places.</p> <p>Art preserves and depicts history in ways words cannot.</p> <p>Art celebrates the unique characteristics of all cultures.</p> <p>Subject matter, symbols and ideas are all rooted in culture.</p> <p>Natural resources have influenced the creation of indigenous art forms.</p> <p>Timeless works of art are deemed important for a number and variety of reasons.</p> <p>Reflection, assessment and refinement are key steps in the process of creating art. The process of creating art requires critical and creative problem solving.</p>	<p>To what extent does art reflect upon and have an influence on history?</p> <p>What makes some works of art great?</p> <p>When does a work of art have merit?</p> <p>To what extent is it adequate or appropriate to say “I like it” or “I don’t like it” when discussing the merit of a work of art?</p> <p>How is learning deepened through a study of visual art?</p> <p>In what ways do the learning processes occurring in visual art differ from the learning processes in other disciplines?</p> <p><b><u>Learning Targets:</u></b> Describe the three orders of decorative style that originated in Greece</p> <p>Identify the contributions of the ancient Greeks to the history of art</p> <p>Explain how Greek sculpture changed over time from the Archaic period, through the Classical period, to the Hellenistic period</p> <p>Discuss the contributions of Myron, Phidias, and Polyclitus to Greek sculpture</p> <p>Name the ways in which Roman artists improve on earlier building processes</p>	<p>artist’s use of elements and principles. Explain the idea you think the artist was trying to communicate.</p> <ul style="list-style-type: none"> <li>• Create a Greek vase by folding a piece of paper in half. Outline one side of the vase, open the paper and complete the other half by making the container symmetrical. Plan a decorative design by focusing on geometric patterns. Add figures and lifelike details.</li> <li>• Use tempera or acrylic to paint a line drawing of features in Greek architecture. Use analogous colors. Use contrasting values to emphasize the interesting or important parts of the painting. Create a mood such as pleasant and inviting or somber and forbidding.</li> <li>• Compare and contrast the differences in Greek and Roman Sculpture.</li> </ul>

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<p><b>5.4E</b> Analyze works of art to speculate why they were created</p> <p><b>5.5E</b> Evaluate the artist's intent and effectiveness in communicating ideas and emotions in works of art</p> <p><b>5.6E</b> Apply visual arts vocabulary when reflecting upon and assessing works of art</p> <p><b>5.7E</b> Describe how a work of art can convey a voice of one or a voice of many</p> <p><b>6.1E</b> Compare and contrast relationships and characteristics between the visual arts and other disciplines</p> <p><b>6.2E</b> Compare the use of technology, media and processes of the visual arts with other disciplines</p> <p><b>6.3E</b> Describe and/or demonstrate how skills transfer between the visual arts and other disciplines</p> <p><b>6.4E</b> Describe how learning in the visual arts helps develop essential skills for life and the workplace</p>	<p>The means to create art always changes.</p>	<p>Describe a Roman bath and explain why this kind of structure was so important to the Romans</p> <p>Describe the characteristics of Roman public buildings</p>	
<p><b>Unit Four: Art Of Asia, The Americas, And Africa</b>  <b>Timeline: 7-9 classes</b></p>			
<p><b>2.4E</b> Analyze the elements of art</p> <p><b>2.5E</b> Evaluate works of art in terms of structure and function</p> <p><b>3.1E</b> Identify subject matter, symbols and ideas in works of art</p>	<p>Art is a form of expression that employs a system of visual symbols.</p> <p>Art may be created solely to fulfill a need to create.</p> <p>Art is a universal symbol</p>	<p>How is learning deepened through a study of visual art?</p> <p>In what ways do the learning processes occurring in visual art differ from the learning processes in other disciplines?</p>	<ul style="list-style-type: none"> <li>• Enter the museum site and click on the Art of Asia link. Take the tour and discover the myths and legends behind the artworks.</li> </ul>

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<p><b>3.3E</b> Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art</p> <p><b>3.6E</b> Analyze how the use of subject matter, symbols and ideas are used in works of art</p> <p><b>4.1E</b> Identify historical and cultural characteristics of works of art</p> <p><b>4.2E</b> Describe how the arts and artists influence each other across history and cultures</p> <p><b>4.3E</b> Compare the purpose of works of art and design in history and cultures</p> <p><b>4.4E</b> Speculate on how history and culture give meaning to a work of art</p> <p><b>4.5E</b> Describe and differentiate the roles of artists in society across history and cultures</p> <p><b>4.6E</b> Describe how history and cultures influence the visual arts</p> <p><b>4.7E</b> Describe how the visual arts influence history and cultures</p> <p><b>5.1E</b> Discuss how individual experiences influence personal works of art</p> <p><b>5.2E</b> Identify ways the visual arts are used as communication</p> <p><b>5.3E</b> Describe personal responses to selected works of art</p>	<p>system that transcends language barriers.</p> <p>Art draws upon all aspects of human experience.</p> <p>The process of choosing and evaluating subject matter, symbols and ideas may be deliberate or intuitive.</p> <p>Art has been created by all peoples, in all times and in all places.</p> <p>Art preserves and depicts history in ways words cannot.</p> <p>Art celebrates the unique characteristics of all cultures.</p> <p>Subject matter, symbols and ideas are all rooted in culture. Natural resources have influenced the creation of indigenous art forms.</p> <p>Timeless works of art are deemed important for a number and variety of reasons.</p> <p>Reflection, assessment and refinement are key steps in the process of creating art.</p> <p>The process of creating art requires critical and creative problem solving.</p>	<p>What makes art more or less authentic?</p> <p>To what extent does history reflect upon and have an influence on art?</p> <p>To what extent does art reflect upon and have an influence on history?</p> <p>What makes some works of art great?</p> <p>When does a work of art have merit?</p> <p>To what extent is it adequate or appropriate to say “I like it” or “I don’t like it” when discussing the merit of a work of art?</p> <p><b><u>Learning Targets:</u></b> Describe the development of the Hindu and Buddhist religions in India</p> <p>Explain how the Hindu and Buddhist religions influenced the architecture and sculpture of India</p> <p>Identify major Chinese dynasties and discuss the important artworks produced during each</p> <p>Trace the influences on Japanese art Identify specific Japanese art styles</p> <p>Identify the contributions to art made by the Native American cultures in the Arctic, Northwest Coast, Southwest, Great Plains, and Woodland regions</p>	<ul style="list-style-type: none"> <li>• Research symbols in Buddhist art and draw as many symbols as you see today.</li> <li>• Study Figure 10.11 and design your own human spirit and have either she or he hold symbolic objects that are used in your religious affiliations. Explain below the drawing the symbolism you used and why you included it.</li> <li>• Research a Chinese hand scroll and create one that tells a story. Use multiple vanishing points and include verbal and visual narrative. Critique your work by reviewing art elements and principles. Share you scroll and critique with the class.</li> <li>• Create a negative shape painting by painting a large branch where most but not all the leaves have been removed. Make sure the leaves and branches run off the paper. Use tempera or acrylic and paint only the negative shapes. Use a variety of 2 complementary colors. Follow the art critique</li> </ul>

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<p><b>5.4E</b> Analyze works of art to speculate why they were created</p> <p><b>5.5E</b> Evaluate the artist's intent and effectiveness in communicating ideas and emotions in works of art</p> <p><b>5.6E</b> Apply visual arts vocabulary when reflecting upon and assessing works of art</p> <p><b>5.7E</b> Describe how a work of art can convey a voice of one or a voice of many</p> <p><b>6.1E</b> Compare and contrast relationships and characteristics between the visual arts and other disciplines</p> <p><b>6.2E</b> Compare the use of technology, media and processes of the visual arts with other disciplines</p> <p><b>6.3E</b> Describe and/or demonstrate how skills transfer between the visual arts and other disciplines</p> <p><b>6.4E</b> Describe how learning in the visual arts helps develop essential skills for life and the workplace</p>	<p>The means to create art always changes.</p>	<p>Discuss the influence of geography and beliefs on the artworks created by those Native American cultures</p> <p>Identify the contributions to art made by the Olmec, the Maya, the Aztecs, and the Incas</p> <p>Identify important features in the art and architecture of the Empire of Mali</p> <p>Explain the importance of goldworks and kente cloth in the Asante kingdom</p> <p>Name and describe the different types of figures created by African artists, and explain their functions</p> <p>Identify the medium and the technique used in the production of most African sculptures</p> <p>Discuss the purposes of African masks</p>	<p>system of “describe, analyze, interpret and judge”</p> <ul style="list-style-type: none"> <li>• Design your own totem pole using animal symbols that relate to your own family. Create designs that will hold interest for the viewer.</li> <li>• Create a small mask using clay and glaze it using as many elements of design as you can. Identify and describe the use of design elements and principles.</li> <li>• Compare figure 11.18 with the Royal Woman in Figure 11.17. Give your opinion as to whether this as a successful work of art? Include the aesthetic qualities you used to base your decision.</li> <li>• Research Willie Seaweed and describe 3 totem poles he designed and carved. While Seaweed was a preserver of tradition, explain how he was also an innovator who encouraged the public to see his craft as exceptional works of art.</li> <li>• Study and research</li> </ul>

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			Xenobia Bailey's unique fiber art using multiple line patterns in decorative hair braiding, headgear, crowns and wall hangings. Create a pen and ink line drawing that imitates some of her patterns, movement and energy she creates.
<b>Unit Five: Art in Quest Of Salvation</b> <b>Timeline: 8-10 classes</b>			
<p><b>1.3E</b> Use media and tools in a safe and responsible manner</p> <p><b>2.3E</b> Identify the principles of design</p> <p><b>2.4E</b> Analyze the elements of art</p> <p><b>2.5E</b> Evaluate works of art in terms of structure and function</p> <p><b>2.6E</b> Analyze the principles of design</p> <p><b>3.1E</b> Identify subject matter, symbols and ideas in works of art</p> <p><b>3.3E</b> Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art</p> <p><b>3.6E</b> Analyze how the use of subject matter, symbols and ideas are used in works of art</p> <p><b>4.1E</b> Identify historical and cultural characteristics of works of art</p> <p><b>4.2E</b> Describe how the arts and artists influence</p>	<p>Artists consider multiple approaches to visual problems.</p> <p>Artists create works of art employing both conscious and intuitive thought.</p> <p>Artists make thoughtful choices in creating works of art.</p> <p>Form and function may or may not be related one to the other.</p> <p>Art is a form of expression that employs a system of visual symbols.</p> <p>Art may be created solely to fulfill a need to create.</p> <p>Art is a universal symbol system that transcends language barriers.</p> <p>Art has been created by all</p>	<p>Why do artists select one medium over another?</p> <p>To what extent is a work of art dependent upon the point of view of the artist?</p> <p>To what extent is a work of art dependent upon the point of view of the viewer?</p> <p>How and why is art used as a vehicle for communication?</p> <p>What is art?</p> <p>How does the use of specific symbols influence the meaning of a work of art?</p> <p>To what extent does history reflect upon and have an influence on art?</p> <p>To what extent does art reflect upon and have an influence on history?</p> <p>What makes some works of art great?</p>	<ul style="list-style-type: none"> <li>• Create at least 10 symbols for birds, animals, plants and other objects to symbolize Christian ideas.</li> <li>• Divide a paper into 2 columns. In one column, make a sketch of each artifact on page 294. In the next column record notes about the purpose of each item and add facts from the text or other sources.</li> <li>• Using the architectural feature described on page 299, design your own mosque interior. Because Islamic artists did not want to diminish the greatness of God's creative power, they decorated their mosques with ornate calligraphy, geometric patterns, and stylized plants and flowers. Include this type of</li> </ul>

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<p>each other across history and cultures</p> <p><b>4.3E</b> Compare the purpose of works of art and design in history and cultures</p> <p><b>4.4E</b> Speculate on how history and culture give meaning to a work of art</p> <p><b>4.5E</b> Describe and differentiate the roles of artists in society across history and cultures</p> <p><b>4.6E</b> Describe how history and cultures influence the visual arts</p> <p><b>4.7E</b> Describe how the visual arts influence history and cultures</p> <p><b>5.1E</b> Discuss how individual experiences influence personal works of art</p> <p><b>5.2E</b> Identify ways the visual arts are used as communication</p> <p><b>5.3E</b> Describe personal responses to selected works of art</p> <p><b>5.4E</b> Analyze works of art to speculate why they were created</p> <p><b>5.5E</b> Evaluate the artist's intent and effectiveness in communicating ideas and emotions in works of art</p> <p><b>5.6E</b> Apply visual arts vocabulary when reflecting upon and assessing works of art</p> <p><b>5.7E</b> Describe how a work of art can convey a</p>	<p>peoples, in all times and in all places.</p> <p>Art preserves and depicts history in ways words cannot.</p> <p>Art celebrates the unique characteristics of all cultures.</p> <p>Timeless works of art are deemed important for a number and variety of reasons.</p> <p>Reflection, assessment and refinement are key steps in the process of creating art.</p> <p>The process of creating art requires critical and creative problem solving.</p> <p>The means to create art always changes.</p>	<p>When does a work of art have merit?</p> <p>To what extent is it adequate or appropriate to say “I like it” or “I don’t like it” when discussing the merit of a work of art?</p> <p>How is learning deepened through a study of visual art?</p> <p><b><u>Learning Targets:</u></b>          Explain how early Christians used art to express their religious beliefs</p> <p>Discuss the influence of Islam on the art of the Fertile Crescent and Moorish Spain</p> <p>Explain the importance of book illustrations in Islamic art</p> <p>Identify the three periods of the Middle Ages          Explain the contributions Charlemagne made to learning and the arts during the Early Medieval period.</p> <p>Discuss the importance of monasticism and the contributions of monks to the art and architecture of the Early Medieval period</p> <p>Discuss the effects of feudalism on Romanesque architecture</p> <p>Describe the structural changes made in churches during the Romanesque period</p>	<p>decorative embellishments in your rendering.</p> <ul style="list-style-type: none"> <li>• Create a word design by following the lesson on page 305.</li> <li>• Study and examine the process of creating beautiful and intricate illuminated letters and create one of your own by using the initial of your first name.</li> <li>• Find examples of castles, churches, cathedrals in books and other resources. Pay attention to where they are located and the purpose they serve. Locate buildings in your community that serve special functions and draw a diagram indicating locations and purposes of these buildings.</li> <li>• Create a line drawing of a symmetrical gothic building or church in pen and ink.</li> <li>• Carve a tympanum landscape relief in clay as described on page 347.</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
<p>voice of one or a voice of many</p> <p><b>6.1E</b> Compare and contrast relationships and characteristics between the visual arts and other disciplines</p> <p><b>6.2E</b> Compare the use of technology, media and processes of the visual arts with other disciplines</p> <p><b>6.3E</b> Describe and/or demonstrate how skills transfer between the visual arts and other disciplines</p> <p><b>6.4E</b> Describe how learning in the visual arts helps develop essential skills for life and the workplace</p>		<p>Describe the main features of Gothic architecture</p> <p>Explain how the sculptures on Gothic cathedrals differed from sculptures on Romanesque churches</p> <p>Discuss the effects of feudalism on Romanesque architecture</p> <p>Describe the structural changes made in churches during the Romanesque period</p> <p>Describe the main features of Gothic architecture</p> <p>Explain how the sculptures on Gothic cathedrals differed from sculptures on Romanesque churches</p> <p>Analyze how linear perspective and aerial perspective are used to create depth and space</p>	
<p><b>Unit Six: Art of An Emerging Modern Europe</b>  <b>Timeline: 10 classes</b></p>			
<p><b>2.1E</b> Identify the elements of art</p> <p><b>2.2E</b> Select and use the elements of art in works of art</p> <p><b>2.3E</b> Identify the principles of design</p> <p><b>2.4E</b> Analyze the elements of art</p> <p><b>2.5E</b> Evaluate works of art in terms of structure and function</p> <p><b>2.6E</b> Analyze the principles of design</p>	<p>Art is a form of expression that employs a system of visual symbols.</p> <p>Art may be created solely to fulfill a need to create.</p> <p>Art is a universal symbol system that transcends language barriers.</p> <p>Art draws upon all aspects of human experience.</p>	<p>How is learning deepened through a study of visual art?</p> <p>In what ways do the learning processes occurring in visual art differ from the learning processes in other disciplines?</p> <p>What makes art more or less authentic?</p> <p>To what extent does history reflect upon and have an influence on art?</p>	<ul style="list-style-type: none"> <li>• Locate images from DaVinci’s sketches in books and on the internet. Make a list of things that Leonardo studied as an artist engineer, and scientist.</li> <li>• Create a maze drawing based on 2 point perspective. Use arches, columns, and domes in the</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
<p><b>2.7E</b> Select and use the principles of design in works of art</p> <p><b>2.8E</b> Select and apply the knowledge of the elements of art and principles of design to convey ideas in works of art</p> <p><b>2.9E</b> Plan, design and execute multiple solutions to challenging visual arts problems</p> <p><b>2.10E</b> Analyze how the elements of art and principles of design applied through various media, techniques and processes produce different effects</p> <p><b>3.1E</b> Identify subject matter, symbols and ideas in works of art</p> <p><b>3.2E</b> Integrate a variety of sources for subject matter, symbols and/ or ideas which best communicate an intended meaning in works of art</p> <p><b>3.3E</b> Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art</p> <p><b>3.4E</b> Select and use subject matter, symbols and ideas to communicate meaning in works of art</p> <p><b>3.6E</b> Analyze how the use of subject matter, symbols and ideas are used in works of art</p> <p><b>5.1E</b> Discuss how individual experiences influence personal works of art</p> <p><b>5.2E</b> Identify ways the visual arts are used as communication</p>	<p>The process of choosing and evaluating subject matter, symbols and ideas may be deliberate or intuitive.</p> <p>Art has been created by all peoples, in all times and in all places.</p> <p>Art preserves and depicts history in ways words cannot.</p> <p>Art celebrates the unique characteristics of all cultures.</p> <p>Subject matter, symbols and ideas are all rooted in culture.</p> <p>Natural resources have influenced the creation of indigenous art forms.</p> <p>Timeless works of art are deemed important for a number and variety of reasons.</p> <p>Reflection, assessment and refinement are key steps in the process of creating art.</p>	<p>To what extent does art reflect upon and have an influence on history?</p> <p><b>Learning Targets:</b> Explain the impact of the printing press on the period</p> <p>Identify the ideas of the Renaissance and their influence on art and artists</p> <p>Identify the artists of the High Renaissance and describe their contributions</p> <p>Discuss the precision and color that mark the works of Jan van Eyck</p> <p>Describe the different in painting done by Jan van Eyck and Rogier van der Weyden</p> <p>Discuss the artistic contributions of Hugo van der Goes</p> <p>Explain what Mannerism is and why it developed</p> <p>Identify mannerist characteristics in the works of Parmigianino, Tintoretto, and El Greco</p> <p>Identify the most common subject of Spanish paintings during the seventeenth century</p> <p>Identify the difference between Baroque and Rococo art</p>	<p>drawing. Research modern architectural forms such as the cantilever and include them in your work. Display your work and discuss perspective with the class.</p> <ul style="list-style-type: none"> <li>• Study the symbolism of Flemish art. Select another painting during that time period and see if you can determine other symbols.</li> <li>• Using charcoal, pastels, or soft pencil create a drawing that uses methods used by Titian. Try making use of light and shadow more important than the use of line.</li> <li>• Using the idea of distortion of figures in the mannerist style, take several pictures of groups of people around your school with a digital camera. Create your own mannerist painting using a computer image manipulation program. Print your work and create a class display</li> <li>• Refer to the studio lesson on page 415 on painting a bizarre creature.</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
<p><b>5.3E</b> Describe personal responses to selected works of art</p> <p><b>5.4E</b> Analyze works of art to speculate why they were created</p> <p><b>5.5E</b> Evaluate the artist's intent and effectiveness in communicating ideas and emotions in works of art</p> <p><b>5.6E</b> Apply visual arts vocabulary when reflecting upon and assessing works of art</p> <p><b>5.7E</b> Describe how a work of art can convey a voice of one or a voice of many</p>		<p>Identify and describe the best known work of Sir Christopher Wren</p>	<ul style="list-style-type: none"> <li>• Create chiaroscuro by turning off the lights and shining a bright spotlight on the center stage. Using charcoal create quick sketches of models in extreme light. Capture the technique of chiaroscuro.</li> <li>• Students create an expressive self-portrait collage as described on page 459</li> </ul>
<p><b>Unit Seven: Art of the Modern Era</b>  <b>Timeline: 10 classes</b></p>			
<p><b>2.1E</b> Identify the elements of art</p> <p><b>2.2E</b> Select and use the elements of art in works of art</p> <p><b>2.3E</b> Identify the principles of design</p> <p><b>2.4E</b> Analyze the elements of art</p> <p><b>2.5E</b> Evaluate works of art in terms of structure and function</p> <p><b>2.6E</b> Analyze the principles of design</p> <p><b>2.7E</b> Select and use the principles of design in works of art</p> <p><b>2.8E</b> Select and apply the knowledge of the elements of art and principles of design to convey ideas in works of art</p>	<p>Artists create works of art employing both conscious and intuitive thought.</p> <p>Artists make thoughtful choices in creating works of art.</p> <p>Every work of art has a point of view.</p> <p>Form and function may or may not be related one to the other.</p> <p>Art is a form of expression that employs a system of visual symbols.  Art may be created solely to fulfill a need to create.</p>	<p>How is learning deepened through a study of visual art?</p> <p>In what ways do the learning processes occurring in visual art differ from the learning processes in other disciplines?</p> <p>What makes art more or less authentic?</p> <p>To what extent does history reflect upon and have an influence on art?</p> <p><b>Learning Targets:</b>  Describe the Neoclassic style and discuss the works of artists who practice this style  Define Romanticism and discuss some of the works created by artist associated with this style</p>	<ul style="list-style-type: none"> <li>• Study messages contained in <i>The Death of Marat</i> and <i>Napoleon in his Study</i>. Describe those messages. Next imagine that you are Jacques Louis David and create thumbnail sketches of the 2 works, but change the message of each work. Share the sketches and messages with the class.</li> <li>• Examine and study Interpreting Realism in Art on page 476.</li> <li>• Design a postcard that might have been written by a traveler in the American</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
<p><b>2.9E</b> Plan, design and execute multiple solutions to challenging visual arts problems</p> <p><b>2.10E</b> Analyze how the elements of art and principles of design applied through various media, techniques and processes produce different effects</p> <p><b>3.1E</b> Identify subject matter, symbols and ideas in works of art</p> <p><b>3.2E</b> Integrate a variety of sources for subject matter, symbols and/ or ideas which best communicate an intended meaning in works of art</p> <p><b>3.3E</b> Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art</p> <p><b>3.4E</b> Select and use subject matter, symbols and ideas to communicate meaning in works of art</p> <p><b>3.6E</b> Analyze how the use of subject matter, symbols and ideas are used in works of art</p> <p><b>5.1E</b> Discuss how individual experiences influence personal works of art</p> <p><b>5.2E</b> Identify ways the visual arts are used as communication</p> <p><b>5.3E</b> Describe personal responses to selected works of art</p> <p><b>5.4E</b> Analyze works of art to speculate why they were created</p>	<p>Art is a universal symbol system that transcends language barriers.</p>	<p>Identify the two major English landscape painters of the period and compare their works</p> <p>Define Realism and identify some artists associated with this style of painting</p> <p>Identify the objectives of the Impressionists and describe the painting techniques they developed to achieve those objectives</p> <p>Identify major Impressionist painters and describe some of their works</p> <p>Describe the sculptures of Auguste Rodin and explain his relationship to the Impressionists</p> <p>Define and explain Post-Impressionism</p> <p>Describe the painting styles of Paul Cezanne, Vincent van Gogh, and Paul Gauguin</p> <p>Identify two of the first Realists in American painting, and describe their styles</p> <p>Explain the style and objectives of the Fauves and identify two artists associated with this movement</p> <p>Discuss the objectives of the Expressionists and names some of the artists associated with this art movement</p>	<p>west to a family back home. On one side draw a scene from this period that depicts the clothing styles of the time and on the other side write a note home about the trip.</p> <ul style="list-style-type: none"> <li>• Research the history behind one of the photos on page 490 and write a description of what the photographer is trying to say. Use the photo to illustrate your work. Explain your resources and why you chose them.</li> <li>• Create a pointillism painting by choosing a simple outdoor object as your subject. Study the subject carefully in different light situations or at different times of the day. Paint the object in a variety of ways.</li> <li>• Investigate the work of Kandinsky. Choose an emotion you can visually communicate. Pick a medium and create the emotion as a painting or visual message.</li> <li>• Working in small groups design a mural for your</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
<p><b>5.5E</b> Evaluate the artist's intent and effectiveness in communicating ideas and emotions in works of art</p> <p><b>5.6E</b> Apply visual arts vocabulary when reflecting upon and assessing works of art</p> <p><b>5.7E</b> Describe how a work of art can convey a voice of one or a voice of many</p>		<p>Define nonobjective art</p> <p>Describe the ideas underlying Cubism and identify artists associated with this style</p> <p>Name the Mexican muralists and tell what they chose as subject matter for their art</p> <p>Discuss the importance of the Armory Show of 1913</p> <p>Identify trends in architecture since the middle of the twentieth century</p> <p>Describe Postmodern architecture and identify important Postmodern architects</p> <p>Discuss the impact of technology on contemporary art</p>	<p>school that makes a strong visual statement about your community.</p> <ul style="list-style-type: none"> <li>• Create an expressive computer painting as described on page 581</li> </ul>
<p><b>Unit Eight: The Golden Mean to an End</b>  <b>Timeline: 8- 10 classes</b></p>			
<p><b>1.1E</b> Select and use different media, techniques and processes that are used to create works of art</p> <p><b>1.2E</b> Use selected two-dimensional and three-dimensional media to communicate ideas</p> <p><b>2.3E</b> Identify the principles of design</p> <p><b>2.5E</b> Evaluate works of art in terms of structure and function</p> <p><b>2.6E</b> Analyze the principles of design</p>	<p>Design is inherent in nature.</p> <p>Design is a plan and process. Artists make thoughtful choices in creating works of art.</p> <p>Form and function may or may not be related to one another.</p> <p>Art is a universal symbol</p>	<p>How is design expressed in the natural and human-made environment?</p> <p>To what extent does good design integrate form with function?</p> <p>What makes a great work of art?</p> <p>How might science and art be related?</p> <p><b><u>Learning Targets:</u></b>  Compare, analyze, and discuss works</p>	<ul style="list-style-type: none"> <li>• Students will analyze and compare examples in nature with artworks created by man then demonstrate properties of the Golden Mean. Students will use information from the analysis to generate ideas to design a composition using the Golden Mean and inspired by nature. These concepts will carry over to a series of drawings exploring how</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
<p><b>2.7E</b> Select and use the principles of design in works of art</p> <p><b>2.9E</b> Plan, design and execute multiple solutions to challenging visual arts problems</p> <p><b>3.2E</b> Integrate a variety of sources for subject matter, symbols and/ or ideas which best communicate an intended meaning in works of art</p> <p><b>4.1E</b> Identify historical and cultural characteristics of works of art</p> <p><b>4.2E</b> Describe how the arts and artists influence each other across history and cultures</p> <p><b>4.3E</b> Compare the purpose of works of art and design in history and cultures</p> <p><b>4.4E</b> Speculate on how history and culture give meaning to a work of art</p> <p><b>4.5E</b> Describe and differentiate the roles of artists in society across history and cultures</p> <p><b>5.2E</b> Identify ways the visual arts are used as communication</p> <p><b>5.3E</b> Describe personal responses to selected works of art</p> <p><b>6.3E</b> Describe and/or demonstrate how skills transfer between the visual arts and other disciplines</p>	<p>system that transcends language barriers.</p> <p>Timeless works of art are deemed important for a variety of reasons.</p> <p>Reflection, assessment, and refinement are key steps in the process of creating art.</p> <p>There is a relationship between mathematics and visual art.</p> <p>Design is thinking creatively.</p>	<p>of art.</p> <p>Design and complete compositions based upon the Golden Mean.</p> <p>Organize visual information.</p> <p>Use technology to locate and access resources.</p> <p>Talk about and critique their personal work.</p> <p>Identify works of art that illustrate the Golden Mean.</p>	<p>the Golden Mean is used in figure drawing and portraiture.</p> <ul style="list-style-type: none"> <li>• Students will choose a pattern from nature that is created through the phenomenon of the Golden Mean. They will use the layouts provided on the transparencies to create an original work of art for the composition. Students will have access to the Internet to further research natural patterns. Using the Golden Ratio pattern that they chose, they must determine what part of the design will be the center of interest and place it in the section of the pattern of the Golden Ratio.</li> <li>• Students will use critique rubrics and critique protocols on their own and their peers' work.</li> <li>• Students will have the opportunity to refine and revise their work prior to final submission based on critique.</li> <li>• Portfolio reviews.</li> </ul>

Standards Alignment	Unit Concept/Big Ideas	Essential Questions	Assessments
			<ul style="list-style-type: none"> <li>• Written responses to Web Quest about historical uses of Golden Mean.</li> <li>• Artistic process—teacher observation of technique, work habits, and procedures.</li> <li>• Thumbnail sketches.</li> <li>• Worksheets on the Greek Golden Face, constructing a Golden Spiral and Golden Rectangle.</li> <li>• The Golden Ratio quiz.</li> <li>• Class discussion—description on the Golden Ratio found in everyday objects.</li> </ul>

# Curriculum Framework for Visual Arts

School: Newark Charter School

Curricular Tool: Creating and Understanding Drawing - Glencoe

Course: Drawing

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<b>Unit One: Introduction to Drawing</b>			
<b>Timeline : 6 lessons</b>			
<p><b>1.1E</b> Select and use different media, techniques and processes that are used to create works of art</p> <p><b>1.3E</b> Use media and tools in a safe and responsible manner</p> <p><b>1.4E</b> Demonstrate how a single medium or technique can be used to create multiple effects in works of art</p> <p><b>1.6 E</b> Identify different media, techniques and processes that are used to create works of art</p> <p><b>1.7 E</b> Describe how media and techniques are used to create two-dimensional and three-dimensional works of art</p> <p><b>2.1E</b> Identify the elements of art</p> <p><b>2.2E</b> Select and use the elements of art in works of art</p> <p><b>2.3E</b> Identify the principles of design</p> <p><b>2.4E</b> Analyze the elements of art</p> <p><b>2.5E</b> Evaluate works of art in terms of structure and function</p> <p><b>3.1E</b> Identify subject matter, symbols and ideas in works of art</p>	<p>Artists make thoughtful choices in creating works of art.</p> <p>Artists use a variety of techniques and processes to manipulate media to achieve desired effects.</p> <p>Artists must understand media, techniques and process as tools to communicate.</p> <p>Artists consider multiple approaches to visual problems.</p> <p>Artists create works of art employing both conscious and intuitive thought.</p> <p>Form and function may or may not be related one to the other.</p> <p>Art is a form of expression that employs a system of visual symbols.</p> <p>Art may be created solely to fulfill a need to create.</p>	<p><b>Essential Questions:</b></p> <p>Why do artists select one medium over another?</p> <p>To what extent can media be manipulated using a variety of techniques and processes?</p> <p>To what extent does good design integrate form with function?</p> <p>What is art?</p> <p>How does the use of specific symbols influence the meaning of a work of art?</p> <p>What makes art more or less authentic?</p> <p><b>Learning Targets:</b></p> <p>Identify the elements of art.</p> <p>Describe the ways artists use the principles of art to organize the elements of art in their drawings.</p> <p>Analyze how the elements and principles of art are used to achieve unity</p> <p>Complete a drawing using mixed media</p> <p>Create gesture and contour drawings</p> <p>List the four steps in the art-criticism process</p>	<p><b>Informal:</b></p> <p>Vocabulary Splash Experiments with texture Teacher observation Sketchbook</p> <p><b>Formal Assessment:</b></p> <p>Portfolio selections with summary of the processes used to complete selected work. Rubrics Artist study Vocabulary quiz Design Charts for self, peer and artist assessment</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p><b>3.2E</b> Integrate a variety of sources for subject matter, symbols and/ or ideas which best communicate an intended meaning in works of art</p> <p><b>3.3E</b> Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art</p> <p><b>3.6E</b> Analyze how the use of subject matter, symbols and ideas are used in works of art</p>	<p>Art is a universal symbol system that transcends language barriers.</p> <p>Art draws upon all aspects of human experience. The process of choosing and evaluating subject matter, symbols and ideas may be deliberate or intuitive.</p>	<p>Identify and describe three theories of art</p> <p>Describe three kinds of aesthetic qualities</p>	
<p><b>Unit Two: Lines</b> <b>Timeline: 4 lessons</b></p>			
<p><b>1.1E</b> Select and use different media, techniques and processes that are used to create works of art</p> <p><b>1.2E</b> Use selected two-dimensional and three-dimensional media to communicate ideas</p> <p><b>1.4E</b> Demonstrate how a single medium or technique can be used to create multiple effects in works of art</p> <p><b>1.7 E</b> Describe how media and techniques are used to create two-dimensional and three-dimensional works of art</p> <p><b>2.1E</b> Identify the elements of art</p> <p><b>2.2E</b> Select and use the elements of art in works of art</p> <p><b>2.3E</b> Identify the principles of design</p> <p><b>2.5E</b> Evaluate works of art in terms of structure and function</p>	<p>Artists must understand media, techniques and process as tools to communicate</p> <p>Artists consider multiple approaches to visual problems</p> <p>Form and function may or may not be related one to the other</p> <p>Perspective</p> <p>Movement</p> <p>Contrast</p>	<p>To what extent can media be manipulated using a variety of techniques and processes?</p> <p>How can lines express emotion?</p> <p>Why is value an important part of the line design?</p> <p>To what extent does good design integrate form with function?</p> <p><b><u>Learning Targets:</u></b></p> <p>Create a line drawing using different types of lines, using charcoal, pencil and black markers.</p> <p>Create a piece consisting of contrast, movement and rhythm.</p> <p>Create balance between their lights and darks.</p>	<p>Students will create a line pattern design. They will have a 9x12 piece paper, and worksheets on different types of lines. The designs will create movement and value with black and white.</p> <p>Students will work with 9x12 paper and to create 2-point perspective. Students will practice in their sketchbooks creating two point perspective buildings. Once completed they will work on a cityscape using only two point perspective and line designs to create texture and implied lines.</p> <p>See unit for more assessment options</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p><b>2.9E</b> Plan, design and execute multiple solutions to challenging visual arts problems</p> <p><b>4.7E</b> Describe how the visual arts influence history and cultures</p> <p><b>5.4E</b> Analyze works of art to speculate why they were created</p>		<p>Create 2-point perspective buildings drawing using all implied lines to imply texture.</p> <p>Evaluate and discuss their pieces and pieces of their peers using a critique protocol and rubric.</p> <p>Analyze artist’s work and thoughts on why they created their pieces and their use of lines.</p>	
<p><b>Unit Three: Imitational</b> <b>Timeline: 8 lessons</b></p>			
<p><b>2.1E</b> Identify the elements of art</p> <p><b>2.2E</b> Select and use the elements of art in works of art</p> <p><b>2.3E</b> Identify the principles of design</p> <p><b>2.4E</b> Analyze the elements of art</p> <p><b>2.6E</b> Analyze the principles of design</p> <p><b>2.7E</b> Select and use the principles of design in works of art</p> <p><b>2.8E</b> Select and apply the knowledge of the elements of art and principles of design to convey ideas in works of art</p> <p><b>2.10E</b> Analyze how the elements of art and principles of design applied through various media, techniques and processes produce different effects</p> <p><b>3.1E</b> Identify subject matter, symbols and ideas in</p>	<p>Art is a form of expression that employs a system of visual symbols.</p> <p>Artists make thoughtful choices in creating works of art.</p> <p>Artists use a variety of techniques and processes to manipulate media to achieve desired effects.</p> <p>Artists must understand media, techniques and process as tools to communicate.</p> <p>Artists learn rules in order to break them.</p> <p>Artists consider multiple approaches to visual problems.</p>	<p><b>Essential Questions:</b> Why do artists select one medium over another?</p> <p>To what extent can media be manipulated using a variety of techniques and processes?</p> <p>What makes some works of art great?</p> <p>When does a work of art have merit?</p> <p>To what extent is it adequate or appropriate to say “I like it” or “I don’t like it” when discussing the merit of a work of art?</p> <p>How and why is art used as a vehicle for communication?</p> <p><b>Learning Targets:</b> Explain how an imitationalist judges drawings</p> <p>Describe the literal qualities in drawings</p>	<p><b>Informal:</b> Vocabulary Splash Experiments with texture Teacher observation Sketchbook Students judge drawing based on their literal qualities, and give reasons for their judgment.</p> <p><b>Formal Assessment:</b> Portfolio selections with summary of the processes used to complete selected work. Rubrics Artist study Vocabulary quiz Design Charts for self, peer and artist assessment</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p>works of art</p> <p><b>3.2E</b> Integrate a variety of sources for subject matter, symbols and/ or ideas which best communicate an intended meaning in works of art</p> <p><b>3.3E</b> Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art</p> <p><b>3.5E</b> Describe and differentiate the origins of specific subject matter, symbols and ideas in works of art</p> <p><b>5.1E</b> Discuss how individual experiences influence personal works of art</p> <p><b>5.3E</b> Describe personal responses to selected works of art</p> <p><b>5.4E</b> Analyze works of art to speculate why they were created</p> <p><b>5.5E</b> Evaluate the artist's intent and effectiveness in communicating ideas and emotions in works of art</p> <p><b>5.6E</b> Apply visual arts vocabulary when reflecting upon and assessing works of Art</p>	<p>Artists create works of art employing both conscious and intuitive thought.</p>	<p>Understand and demonstrate the use of proportion, negative space, shadows, and perspective in imitational drawings</p> <p>Identify the basic structural proportions of the head and facial features</p>	

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<b>Unit Four: Formal Drawings</b> <b>Timeline: 8 lessons</b>			
<p><b>1.1E</b> Select and use different media, techniques and processes that are used to create works of art</p> <p><b>1.2E</b> Use selected two-dimensional and three-dimensional media to communicate ideas</p> <p><b>1.3E</b> Use media and tools in a safe and responsible manner</p> <p><b>1.4E</b> Demonstrate how a single medium or technique can be used to create multiple effects in works of art</p> <p><b>1.5E</b> Compare and contrast the different effects created by various two-dimensional and three-dimensional works of art</p> <p><b>1.6 E</b> Identify different media, techniques and processes that are used to create works of art</p> <p><b>2.1E</b> Identify the elements of art</p> <p><b>2.2E</b> Select and use the elements of art in works of art</p> <p><b>2.3E</b> Identify the principles of design</p> <p><b>2.4E</b> Analyze the elements of art</p> <p><b>2.5E</b> Evaluate works of art in terms of structure and function</p> <p><b>2.6E</b> Analyze the principles of design</p> <p><b>2.7E</b> Select and use the principles of design in works of art</p>	<p>Artists make thoughtful choices in creating works of art.</p> <p>Artists use a variety of techniques and processes to manipulate media to achieve desired effects.</p> <p>Artists must understand media, techniques and process as tools to communicate.</p> <p>Artists learn rules in order to break them.</p> <p>Artists consider multiple approaches to visual problems.</p> <p>Artists create works of art employing both conscious and intuitive thought</p> <p>Every work of art has a point of view.</p> <p>Form and function may or may not be related one to the other.</p> <p>Art is a form of expression that employs a system of visual symbols.</p>	<p><b>Essential Questions:</b></p> <p>Why do artists select one medium over another?</p> <p>To what extent can media be manipulated using a variety of techniques and processes?</p> <p>To what extent is a work of art dependent upon the point of view of the artist?</p> <p>To what extent is a work of art dependent upon the point of view of the viewer?</p> <p>How and why is art used as a vehicle for communication?</p> <p>To what extent does good design integrate form with function?</p> <p>What makes some works of art great?</p> <p>When does a work of art have merit?</p> <p>To what extent is it adequate or appropriate to say “I like it” or “I don’t like it” when discussing the merit of a work of art?</p> <p><b>Learning Targets</b></p> <p>Identify and describe design qualities in drawings</p> <p>Use the art elements of shape and texture effectively.</p>	<p><b>Informal:</b></p> <p>Vocabulary Splash</p> <p>Experiments with texture</p> <p>Teacher observation</p> <p>Sketchbook</p> <p>Students judge drawing based on their design qualities and give reasons for judgment</p> <p><b>Formal Assessment:</b></p> <p>Portfolio selections with summary of the processes used to complete selected work.</p> <p>Rubrics</p> <p>Artist study</p> <p>Vocabulary quiz</p> <p>Design Charts for self, peer and artist assessment</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p><b>2.8E</b> Select and apply the knowledge of the elements of art and principles of design to convey ideas in works of art</p> <p><b>2.9E</b> Plan, design and execute multiple solutions to challenging visual arts problems</p> <p><b>2.10E</b> Analyze how the elements of art and principles of design applied through various media, techniques and processes produce different effects</p> <p><b>5.1E</b> Discuss how individual experiences influence personal works of art</p> <p><b>5.2E</b> Identify ways the visual arts are used as communication</p> <p><b>5.3E</b> Describe personal responses to selected works of art</p> <p><b>5.4E</b> Analyze works of art to speculate why they were created</p> <p><b>5.5E</b> Evaluate the artist's intent and effectiveness in communicating ideas and emotions in works of art</p> <p><b>5.6E</b> Apply visual arts vocabulary when reflecting upon and assessing works of art</p> <p><b>5.7E</b> Describe how a work of art can convey a voice of one or a voice of many</p>	<p>Reflection, assessment and refinement are key steps in the process of creating art.</p>		

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<b>Unit Five: Emotional Drawings</b> <b>Timeline: 8 lessons</b>			
<p><b>2.1E</b> Identify the elements of art</p> <p><b>2.2E</b> Select and use the elements of art in works of art</p> <p><b>2.3E</b> Identify the principles of design</p> <p><b>2.4E</b> Analyze the elements of art</p> <p><b>2.5E</b> Evaluate works of art in terms of structure and function</p> <p><b>2.6E</b> Analyze the principles of design</p> <p><b>2.7E</b> Select and use the principles of design in works of art</p> <p><b>2.8E</b> Select and apply the knowledge of the elements of art and principles of design to convey ideas in works of art</p> <p><b>2.9E</b> Plan, design and execute multiple solutions to challenging visual arts problems</p> <p><b>2.10E</b> Analyze how the elements of art and principles of design applied through various media, techniques and processes produce different effects</p> <p><b>3.1E</b> Identify subject matter, symbols and ideas in works of art</p> <p><b>3.2E</b> Integrate a variety of sources for subject matter, symbols and/ or ideas which best communicate an intended meaning in works of art</p>	<p>Every work of art has a point of view.</p> <p>Form and function may or may not be related one to the other.</p> <p>Art is a form of expression that employs a system of visual symbols.</p> <p>Art may be created solely to fulfill a need to create.</p> <p>Art is a universal symbol system that transcends language barriers.</p> <p>Art draws upon all aspects of human experience.</p> <p>The process of choosing and evaluating subject matter, symbols and ideas may be deliberate or intuitive. Reflection, assessment and refinement are key steps in the process of creating art.</p>	<p><b>Essential Questions:</b></p> <p>To what extent is a work of art dependent upon the point of view of the viewer?</p> <p>What is art?</p> <p>How does the use of specific symbols influence the meaning of a work of art?</p> <p>What makes art more or less authentic?</p> <p>How and why is art used as a vehicle for communication?</p> <p>What makes some works of art great?</p> <p>When does a work of art have merit?</p> <p>To what extent is it adequate or appropriate to say “I like it” or “I don’t like it” when discussing the merit of a work of art?</p> <p><b>Learning Targets:</b></p> <p>Interpret the feelings, moods, and ideas express by artists in drawings</p> <hr/> <p>Communicate ideas and emotions in abstract and realistic drawings</p> <p>Express humor in drawings</p> <p>Create illustrations that express ideas and emotions</p> <p>Produce mixed media artworks that express ideas and emotions</p>	<p><b>Informal:</b></p> <p>Vocabulary Splash</p> <p>Experiments with texture</p> <p>Teacher observation</p> <p>Sketchbook</p> <p>Students judge drawings based on their expressive qualities and give reasons for judgment</p> <p><b>Formal Assessment:</b></p> <p>Portfolio selections with summary of the processes used to complete selected work.</p> <p>Rubrics</p> <p>Artist study</p> <p>Vocabulary quiz</p> <p>Design Charts for self, peer and artist assessment</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p><b>3.3E</b> Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art</p> <p><b>3.4E</b> Select and use subject matter, symbols and ideas to communicate meaning in works of art</p> <p><b>3.6E</b> Analyze how the use of subject matter, symbols and ideas are used in works of art</p> <p><b>5.1E</b> Discuss how individual experiences influence personal works of art</p> <p><b>5.2E</b> Identify ways the visual arts are used as communication</p> <p><b>5.3E</b> Describe personal responses to selected works of art</p> <p><b>5.4E</b> Analyze works of art to speculate why they were created</p> <p><b>5.5E</b> Evaluate the artist's intent and effectiveness in communicating ideas and emotions in works of art</p> <p><b>5.6E</b> Apply visual arts vocabulary when reflecting upon and assessing works of art</p> <p><b>5.7E</b> Describe how a work of art can convey a voice of one or a voice of many</p>			

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<b>Unit Six: It Ain't Heavy, It's My Baggage (Model Unit)</b> <b>Timeline: 8 lessons</b>			
<p><b>4.1E</b> Identify historical and cultural characteristics of works of art</p> <p><b>4.2E</b> Describe how the arts and artists influence each other across history and cultures</p> <p><b>4.3E</b> Compare the purpose of works of art and design in history and cultures</p> <p><b>4.4E</b> Speculate on how history and culture give meaning to a work of art</p> <p><b>4.5E</b> Describe and differentiate the roles of artists in society across history and cultures</p> <p><b>4.6E</b> Describe how history and cultures influence the visual arts</p> <p><b>4.7E</b> Describe how the visual arts influence history and cultures</p> <p><b>5.1E</b> Discuss how individual experiences influence personal works of art</p> <p><b>5.2E</b> Identify ways the visual arts are used as communication</p> <p><b>5.3E</b> Describe personal responses to selected works of art</p> <p><b>5.4E</b> Analyze works of art to speculate why they were created</p> <p><b>5.5E</b> Evaluate the artist's intent and effectiveness</p>	<p>Art has been created by all peoples, in all times and in all places.</p> <p>Art preserves and depicts history in ways words cannot.</p> <p>Art celebrates the unique characteristics of all cultures.</p> <p>Subject matter, symbols and ideas are all rooted in culture.</p> <p>Natural resources have influenced the creation of indigenous art forms.</p> <p>Timeless works of art are deemed important for a number and variety of reasons.</p> <p>Reflection, assessment and refinement are key steps in the process of creating art.</p> <p>The means to create art always changes.</p>	<p><b>Essential Questions:</b></p> <p>To what extent does history reflect upon and have an influence on art?</p> <p>To what extent does art reflect upon and have an influence on history?</p> <p>What makes some works of art great?</p> <p>When does a work of art have merit?</p> <p>To what extent is it adequate or appropriate to say "I like it" or "I don't like it" when discussing the merit of a work of art?</p> <p>How is learning deepened through a study of visual art?</p> <p>In what ways do the learning processes occurring in visual art differ from the learning processes in other disciplines?</p> <p>Why study art history?</p> <p><b>Learning Targets:</b></p> <p>Identify the steps of art history</p> <p>Describe characteristics of several styles and periods of art</p>	<p><b>Informal:</b></p> <p>Vocabulary Splash</p> <p>Experiments with texture</p> <p>Teacher observation</p> <p>Sketchbook</p> <p>Critique protocol</p> <p><b>Formal Assessment:</b></p> <p>Portfolio selections with summary of the processes used to complete selected work.</p> <p>Rubrics</p> <p>Artist study</p> <p>Vocabulary quiz</p> <p>Design Charts for self, peer and artist assessment</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p>in communicating ideas and emotions in works of art</p> <p><b>5.6E</b> Apply visual arts vocabulary when reflecting upon and assessing works of art</p> <p><b>5.7E</b> Describe how a work of art can convey a voice of one or a voice of many</p> <p><b>6.1E</b> Compare and contrast relationships and characteristics between the visual arts and other disciplines</p> <p><b>6.2E</b> Compare the use of technology, media and processes of the visual arts with other disciplines</p> <p><b>6.3E</b> Describe and/or demonstrate how skills transfer between the visual arts and other disciplines</p> <p><b>6.4E</b> Describe how learning in the visual arts helps develop essential skills for life and the workplace</p>			
<p><b>Unit Seven: Special Topics in Drawings</b>  <b>Timeline: 8 lessons</b></p>			
<p><b>4.1E</b> Identify historical and cultural characteristics of works of art</p> <p><b>4.2E</b> Describe how the arts and artists influence each other across history and cultures</p> <p><b>4.3E</b> Compare the purpose of works of art and design in history and cultures</p> <p><b>4.4E</b> Speculate on how history and culture give meaning to a work of art</p> <p><b>4.5E</b> Describe and differentiate the roles of artists</p>	<p>Art has been created by all peoples, in all times and in all places.</p> <p>Art preserves and depicts history in ways words cannot.</p> <p>Art celebrates the unique characteristics of all cultures.</p> <p>Subject matter, symbols and</p>	<p><b>Essential Questions:</b></p> <p>To what extent does history reflect upon and have an influence on art?</p> <p>To what extent does art reflect upon and have an influence on history?</p> <p>What makes some works of art great?</p> <p>When does a work of art have merit?</p> <p>To what extent is it adequate or appropriate to say “I like it” or “I don’t like it” when</p>	<p><b>Informal:</b></p> <p>Vocabulary Splash  Experiments with texture  Teacher observation  Sketchbook</p> <p><b>Formal Assessment:</b></p> <p>Portfolio selections with summary of the processes used to complete selected work.  Rubrics  Artist study  Vocabulary quiz</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
<p>in society across history and cultures</p> <p><b>4.6E</b> Describe how history and cultures influence the visual arts</p> <p><b>4.7E</b> Describe how the visual arts influence history and cultures</p> <p><b>5.1E</b> Discuss how individual experiences influence personal works of art</p> <p><b>5.2E</b> Identify ways the visual arts are used as communication</p> <p><b>5.3E</b> Describe personal responses to selected works of art</p> <p><b>5.4E</b> Analyze works of art to speculate why they were created</p> <p><b>5.5E</b> Evaluate the artist's intent and effectiveness in communicating ideas and emotions in works of art</p> <p><b>5.6E</b> Apply visual arts vocabulary when reflecting upon and assessing works of art</p> <p><b>5.7E</b> Describe how a work of art can convey a voice of one or a voice of many</p> <p><b>6.1E</b> Compare and contrast relationships and characteristics between the visual arts and other disciplines</p> <p><b>6.2E</b> Compare the use of technology, media and processes of the visual arts with other disciplines</p> <p><b>6.3E</b> Describe and/or demonstrate how skills transfer between the visual arts and other</p>	<p>ideas are all rooted in culture.</p> <p>Natural resources have influenced the creation of indigenous art forms.</p> <p>Timeless works of art are deemed important for a number and variety of reasons.</p> <p>Reflection, assessment and refinement are key steps in the process of creating art.</p> <p>The means to create art always changes.</p>	<p>discussing the merit of a work of art?</p> <p>How is learning deepened through a study of visual art?</p> <p>In what ways do the learning processes occurring in visual art differ from the learning processes in other disciplines?</p> <p>Why study art history?</p> <p><b><u>Learning Targets:</u></b> Identify the steps of art history</p> <p>Describe characteristics of several styles and periods of art</p>	<p>Design Charts for self, peer and artist assessment</p>

Standards Alignment	Unit Concept	Student Learning Targets	Assessments
disciplines  <b>6.4E</b> Describe how learning in the visual arts helps develop essential skills for life and the workplace			

# Curriculum Framework for Physical Education

School: Newark Charter School

Curricular Tool: N/A

Grade: 9-12

Standards Alignment	Unit Concepts	Essential Questions	Assessments
<b>Unit One: Introduction to Physical Education</b> <b>Timeline : 2 week</b>			
Standard 5 – Exhibits responsible personal and social behavior that respects self and others in physical activity settings	Students understand how to move safely in a general space to avoid injury.  Students will learn movement concepts necessary for physical activity.	<b>Essential Questions:</b> What are the personal and social behavioral expectations in physical activity settings?	<b>Informal:</b> <ul style="list-style-type: none"> <li>• Teacher observation</li> <li>• Student behavior</li> </ul> <b>Formal Assessment:</b> <ul style="list-style-type: none"> <li>• Exit Slip</li> </ul>
<b>Unit Two: Fitness Concepts</b> <b>Timeline: 4 weeks</b>			
Standard 3 – Participates in regularly in physical activity  Standard 6 – Creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction through physical activity	Students will know, identify various, Fitness concepts (Flexibility, Cardiovascular endurance, Muscular Strength, Muscular Endurance, and Agility), Fitness activities can be fun, and How fitness components promote a healthy lifestyle  Students will be able demonstrate stretching exercises to target major muscles groups, demonstrate knowledge and importance of aerobic activities, demonstrate the understanding of muscular strength and muscular endurance, demonstrate knowledge of how agility is defined, demonstrate knowledge of body composition and how it is calculated, participate in a goal setting using the information obtained from fitnessgram testing, and participate in class discussion that will center around how fitness components promote a healthy lifestyle	<b>Essential Questions:</b> What can I do to be physically active throughout my life?  What personal meanings do I find through participation in physical activity?	<b>Informal:</b> <ul style="list-style-type: none"> <li>• Teacher Observation</li> </ul> <b>Formal Assessment:</b> <ul style="list-style-type: none"> <li>• Exit Slip</li> <li>• Graphing Worksheets</li> <li>• Transfer task</li> </ul>
<b>Unit Three: Team Building (DDOE Unit)</b> <b>Timeline: 3 weeks</b>			
Standard 5 – Exhibits responsible personal and social behavior that respects self and others in physical activity settings.	Students will know physical activity performed safely prevents injuries, resolving conflict in a physical activity setting leads to a more enjoyable experience, leadership skills to complete tasks with a group, and know trust is an integral part of building relationships.	<b>Essential Questions:</b> What are personal and social behavioral expectations in physical settings?	<b>Informal:</b> <ul style="list-style-type: none"> <li>• Teacher observations</li> </ul> <b>Formal Assessment:</b> <ul style="list-style-type: none"> <li>• Journaling of the</li> </ul>

Standards Alignment	Unit Concepts	Essential Questions	Assessments
	Students will be able to listen to other peoples ideas, effectively resolve conflicts during activities, demonstrate self-control, and trust and depend on teammates.		debriefing questions <ul style="list-style-type: none"> <li>• Challenge Worksheet</li> <li>• Student check sheet for presenting</li> <li>• Transfer task</li> </ul>
<b>Unit Four: Fitnessgram Testing</b> <b>Timeline: 1 week</b>			
Standard 4 – Achieves and maintains a health-enhancing level of physical fitness.  Standard 6 - Creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction through physical activity.	Students will know the health benefits of physical activity, fitness is a personal choice, and how participation contributes to enjoyment  Students will be able to explain how to improve physical fitness, create a list of activities that builds fitness, and explain the benefits of physical activity/physical education.	<b>Essential Questions:</b> Why is physical fitness good for you?  How can I have fun moving?	<b>Informal:</b> <ul style="list-style-type: none"> <li>• Teacher Observation</li> </ul> <b>Formal Assessment:</b> <ul style="list-style-type: none"> <li>• Student test scores entered into the fitnessgram program</li> </ul>
<b>Unit Five: Team Sports</b> <b>Timeline: 10 weeks</b>			
Standard 1 – Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities  Standard 2 – Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.  Standard 6 – Creates opportunities for health, enjoyment, challenge, self expression, and/or social interaction through physical activity.	Students will know performing movement skills in a technically correct manner, understand concepts of movement will improve performance of a specific skill and provide the foundation for variety of sports and activities, implementing effective offensive and defensive strategies necessary for game situations, and understand fitness concepts and skills and integrating them into your everyday routine that supports wellness.  Students will be able to demonstrate mechanically correct form and control when combining and modifying movement skills in applied settings, use information to analyze and correct errors in movement skills and patterns for the applied settings, transfer specialized movement skills that use similar patterns form one movement activity to another, predict changes in movement performance on the application of balance, counter balance, weight transfer, and agility, demonstrate understanding and assess tactical understanding using offensive and defensive strategies in applied settings, investigate the impact of rules and	<b>Essential Questions:</b> How do I make motor skills and physical activity and integral part of my life?  What concepts principles, strategies and tactics do apply to specific physical activity?  What personal meaning do I find through participation in physical activity?	<b>Informal:</b> <ul style="list-style-type: none"> <li>• Teacher observation</li> </ul> <b>Formal Assessment:</b> <ul style="list-style-type: none"> <li>• Skills worksheet</li> <li>• Written test of rules and regulations</li> <li>• Various worksheets</li> <li>• Transfer task</li> </ul>

Standards Alignment	Unit Concepts	Essential Questions	Assessments
	regulations on the game, and how participating in a sport can impact our health.		
<b>Unit Six: Walking for a Lifetime of Fitness (DDOE Unit)</b> <b>Timeline: 3 weeks</b>			
<p>Standard 3 – Participates in regularly in physical activity.</p> <p>Standard 4 - Achieves and maintains a health-enhancing level of physical fitness.</p> <p>Standard 6 - Creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction through physical activity</p>	<p>Students will know proper stretching for walking, the health-related components of fitness specifically related to walking, how to use a pedometer, how many steps they need to take daily to maintain fitness levels, and the health and social benefits of walking.</p> <p>Students will be able to use a pedometer correctly including reading and recording data, explain why walking is an important lifetime activity, plan a walking route based on their personal environment and step needs, and use the Nordic Walkerz correctly and demonstrate various techniques/grips.</p>	<p><b>Essential Questions:</b></p> <p>What can I do to be physically active throughout my life?</p> <p>How can I include physical fitness into my life?</p> <p>What personal meaning do I find through participation in physical activity?</p>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Teacher observation of proper pedometer usage</li> </ul> <p><b>Formal Assessment:</b></p> <ul style="list-style-type: none"> <li>• Guess Your Steps Worksheet</li> <li>• Scavenger Hunt Worksheet</li> <li>• Individual Walking Logs</li> <li>• Transfer task</li> </ul>
<b>Unit Seven: Individual Sports</b> <b>Timeline: 10 weeks</b>			
<p>Standard 1 – Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities</p> <p>Standard 2 – Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities.</p> <p>Standard 6 – Creates opportunities for health, enjoyment, challenge, self expression, and/or social</p>	<p>Students will know performing movement skills in a technically correct manner, understand concepts of movement will improve performance of a specific skill and provide the foundation for variety of sports and activities, implementing effective offensive and defensive strategies necessary for game situations, and understand fitness concepts and skills and integrating them into your everyday routine that supports wellness.</p> <p>Students will be able to demonstrate mechanically correct form and control when combining and modifying movement skills in applied settings, use information to analyze and correct errors in movement skills and patterns for the applied settings, transfer specialized movement skills that use similar patterns from one movement activity to another, predict changes in movement performance on the application of balance, counter balance, weight transfer, and agility, demonstrate understanding and</p>	<p><b>Essential Questions:</b></p> <p>How do I make motor skills and physical activity and integral part of my life?</p> <p>What concepts principles, strategies and tactics do apply to specific physical activity?</p> <p>What personal meaning do I find through participation in physical activity?</p>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Teacher observation</li> </ul> <p><b>Formal Assessment:</b></p> <ul style="list-style-type: none"> <li>• Skills worksheet</li> <li>• Written test of rules and regulations</li> <li>• Various worksheets</li> <li>• Transfer task</li> </ul>

Standards Alignment	Unit Concepts	Essential Questions	Assessments
interaction through physical activity.	assess tactical understanding using offensive and defensive strategies in applied settings, investigate the impact of rules and regulations on the game, and how participating in a sport can impact our health.		
<b>Unit Eight: Fitnessgram testing</b> <b>Timeline: 1 week</b>			
<p>Standard 4 – Achieves and maintains a health-enhancing level of physical fitness.</p> <p>Standard 6 - Creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction through physical activity.</p>	<p>Students will know the health benefits of physical activity, fitness is a personal choice, and how participation contributes to enjoyment</p> <p>Students will be able to explain how to improve physical fitness, create a list of activities that builds fitness, and explain the benefits of physical activity/physical education.</p>	<p><b>Essential Questions:</b></p> <p>Why is physical fitness good for you?</p> <p>How can I have fun moving?</p>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Teacher Observation</li> </ul> <p><b>Formal Assessment:</b></p> <ul style="list-style-type: none"> <li>• Student test scores entered into the fitnessgram program</li> </ul>

# Curriculum Framework for Health

School: Newark Charter School Curricular Tool: DDOE Health Model Units Grade: 9-12

Standards Alignment	Big Ideas	Essential Questions	Assessments
<b>Unit One: Health and Your Wellness</b> <b>Timeline : 3 weeks</b>			
<p><b>Standard 1</b> –Students will understand essential health concepts in order to transfer knowledge into healthy actions for life.</p> <p><b>Standard 2</b> – Students will analyze the influence of family, peers, culture, media, technology and other factors on health behaviors.</p> <p><b>Standard 3</b> – Students will demonstrate the ability to access information, products and services to enhance health.</p> <p><b>Standard 4</b> – Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.</p> <p><b>Standard 5</b> – Students will demonstrate the ability to use decision-making skills to enhance health.</p> <p><b>Standard 6</b> – Students will demonstrate the ability to use goal setting skills to enhance health.</p> <p><b>Standard 7</b> – Students will demonstrate the ability to practice health-enhancing and avoid or reduce health risks. (self-management)</p> <p><b>Standard 8</b> – Students will demonstrate the ability to advocate for personal, family, and community health.</p>	<p>Health Is Personal Power</p> <p>Health enhances life.</p> <p>Several factors influence the formation, achievement, and evaluation of a long-term personal health plan</p>	<p>How can I distinguish between controllable risk factors and uncontrollable risk factors?</p> <p>What are the six components of health? How do they work together?</p> <p>How do I resist the three types of direct and indirect pressure?</p> <p>Why is good communication important?</p> <p>What is the different between passive, assertive, and aggressive communication styles?</p>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Teacher Observation</li> <li>• Journal entries</li> <li>• Lesson check up questions</li> <li>• Participation in class discussions</li> </ul> <p><b>Formal Assessment:</b></p> <ul style="list-style-type: none"> <li>• Concept Review worksheets</li> <li>• Section review &amp; quizzes</li> <li>• Reteaching worksheet</li> <li>• Unit test</li> <li>• Transfer task</li> <li>• Develop an action plan to achieve a personal goal</li> <li>• Skit</li> <li>• Rubrics</li> <li>• Informational pamphlet</li> </ul>
<b>Unit Two: Healthy Eating for Life (DE Model Unit)</b> <b>Timeline: 3 weeks</b>			
<p><b>Standard 1</b> –Students will understand essential health concepts in order to transfer knowledge into</p>	<p>Health Is Personal Power</p>	<p>What is Health?</p>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Teacher Observation</li> </ul>

Standards Alignment	Big Ideas	Essential Questions	Assessments
<p>healthy actions for life.</p> <p><b>Standard 2</b> – Students will analyze the influence of family, peers, culture, media, technology and other factors on health behaviors.</p> <p><b>Standard 3</b> – Students will demonstrate the ability to access information, products and services to enhance health.</p> <p><b>Standard 4</b> – Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.</p> <p><b>Standard 5</b> – Students will demonstrate the ability to use decision-making skills to enhance health.</p> <p><b>Standard 6</b> – Students will demonstrate the ability to use goal setting skills to enhance health.</p> <p><b>Standard 7</b> – Students will demonstrate the ability to practice health-enhancing and avoid or reduce health risks. (self-management)</p> <p><b>Standard 8</b> – Students will demonstrate the ability to advocate for personal, family, and community health.</p>	<p>Health enhances life.</p> <p>Personal actions impact self and others.</p> <p>There are barriers that can hinder healthy decision-making.</p> <p>Several factors influence the formation, achievement, and evaluation of a long-term personal health plan.</p>	<p>What prevents people from practicing healthy behavior?</p> <p>What is healthy eating? Does it matter?</p> <p>How can a healthy diet for one person be unhealthy for another?</p> <p>What prevents people from healthy eating?</p>	<ul style="list-style-type: none"> <li>• Journal</li> <li>• Lesson check up questions</li> <li>• Participation in class discussions</li> <li>• Webquest</li> <li>• Fast food findings</li> <li>• Interpretation of nutrition on food labels</li> <li>• Shopping list</li> </ul> <p><b>Formal Assessment:</b></p> <ul style="list-style-type: none"> <li>• Concept Review worksheets</li> <li>• Section review &amp; quizzes</li> <li>• Reteaching worksheet</li> <li>• Transfer task</li> <li>• Create eating plan</li> <li>• Rubrics</li> <li>• Food diary and diet analysis</li> <li>• Self assessment and reflection</li> </ul>
<p><b>Unit Three: Fact or Fiction: Alcohol and Tobacco (DE Model Unit)</b>  <b>Timeline: 2 weeks</b></p>			
<p><b>Standard 1</b> – Students will understand essential health concepts in order to transfer knowledge into healthy actions for life.</p> <p><b>Standard 2</b> – Students will analyze the influence of family, peers, culture, media, technology and other factors on health behaviors.</p> <p><b>Standard 3</b> – Students will demonstrate the ability to access information, products and services to enhance health.</p> <p><b>Standard 5</b> – Students will demonstrate the ability</p>	<p>Health is Personal Power</p> <p>Avoiding alcohol and tobacco is achieved through the understanding and application of resistance skills.</p>	<p>What is Health?</p> <p>What prevents people from practicing healthy behavior?</p> <p>How do personal goals, knowledge and values influence alcohol &amp; tobacco use?</p>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Teacher Observation</li> <li>• Journal</li> <li>• Lesson check up questions</li> <li>• Participation in class discussions</li> <li>• Student self assessment and reflection</li> </ul> <p><b>Formal Assessment:</b></p> <ul style="list-style-type: none"> <li>• Concept Review worksheets</li> <li>• Section review &amp; quizzes</li> </ul>

Standards Alignment	Big Ideas	Essential Questions	Assessments
<p>to use decision-making skills to enhance health.</p> <p><b>Standard 8</b> – Students will demonstrate the ability to advocate for personal, family, and community health.</p>			<ul style="list-style-type: none"> <li>• Reteaching worksheet</li> <li>• Unit test</li> <li>• Transfer task</li> <li>• Informational pamphlet</li> <li>• Rubrics</li> <li>• Powerpoint presentation</li> <li>• Develop a presentation to persuade policy makers to sustain and support and anti-alcohol and drug abuse campaign.</li> </ul>
<p><b>Unit Four: Communicating Through Feelings (DDOE Model Unit)</b>  <b>Timeline: 2 weeks</b></p>			
<p><b>Standard 1</b> –Students will understand essential health concepts in order to transfer knowledge into healthy actions for life.</p> <p><b>Standard 2</b> – Students will analyze the influence of family, peers, culture, media, technology and other factors on health behaviors.</p> <p><b>Standard 4</b> – Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.</p> <p><b>Standard 5</b> – Students will demonstrate the ability to use decision-making skills to enhance health.</p> <p><b>Standard 6</b> – Students will demonstrate the ability to use goal setting skills to enhance health.</p> <p><b>Standard 7</b> – Students will demonstrate the ability to practice health-enhancing and avoid or reduce health risks. (self-management)</p>	<p>What we say and how we say it will affect our relationships with others.</p>	<p>What is Health?</p> <p>What prevents people from practicing healthy behavior?</p> <p>What do I need to learn to improve my communication skills?</p> <p>How can I use my communication skills to improve my relationships with others?</p>	<ul style="list-style-type: none"> <li>• Complete a script on feelings</li> <li>• List and discuss four ways to improve self-esteem</li> <li>• Write a paragraph about listening skills in relationships</li> <li>• Role-plays to demonstrate listening skills</li> <li>• Complete a worksheet on media messages and modeling of passive, assertive, and aggressive behavior.</li> <li>• Design a personal action plan for maintaining your self-esteem and mental health during a challeng.</li> </ul>
<p><b>Unit Four: Should I Take a Chance?</b>  <b>Timeline: 2 weeks</b></p>			
<p><b>Standard 1</b> –Students will understand essential health concepts in order to transfer knowledge into</p>	<p>Addiction changes the brain.  For some, substance use and</p>	<p>What is health?  What prevents people from</p>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Teacher Observation</li> </ul>

Standards Alignment	Big Ideas	Essential Questions	Assessments
<p>healthy actions for life.</p> <p><b>Standard 2</b> – Students will analyze the influence of family, peers, culture, media, technology and other factors on health behaviors.</p> <p><b>Standard 3</b> – Students will demonstrate the ability to access information, products and services to enhance health.</p> <p><b>Standard 4</b> – Students will demonstrate the ability to use interpersonal communication skills to</p> <p><b>Standard 8</b> – Students will demonstrate the ability to advocate for personal, family, and community health.</p>	<p>gambling are a choice; for others, they are not.</p> <p>Advocacy strategies are important to self-management and the avoidance of use or misuse of substances and gambling.</p> <p>Speaking up for myself and becoming resourceful helps me avoid trouble.</p>	<p>practicing healthy behavior?</p> <p>Is addiction a choice?</p> <p>What is my tipping point?</p>	<ul style="list-style-type: none"> <li>• Journal</li> <li>• Lesson check up questions</li> <li>• Participation in class discussions</li> </ul> <p><b>Formal Assessment:</b></p> <ul style="list-style-type: none"> <li>• Concept Review worksheets</li> <li>• Section review &amp; quizzes</li> <li>• Reteaching worksheet</li> <li>• Unit test</li> <li>• Design an educational campaign about addiction for sixth graders that advocates a life free of addiction</li> </ul>
<p><b>Unit Five: Making Proud Choices (DDOE Model Unit)</b>  <b>Timeline: 3 weeks</b></p>			
<p><b>Standard 1</b> –Students will understand essential health concepts in order to transfer knowledge into healthy actions for life.</p> <p><b>Standard 2</b> – Students will analyze the influence of family, peers, culture, media, technology and other factors on health behaviors.</p> <p><b>Standard 4</b> – Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.</p> <p><b>Standard 5</b> – Students will demonstrate the ability to use decision-making skills to enhance health.</p> <p><b>Standard 6</b> – Students will demonstrate the ability to use goal setting skills to enhance health.</p> <p><b>Standard 7</b> – Students will demonstrate the ability to practice health-enhancing and avoid or reduce health risks. (self-management)</p> <p><b>Standard 8</b> – Students will demonstrate the ability to advocate for personal, family, and community</p>	<p>Sexual activity has risks and consequences.</p> <p>Abstinence is a choice.</p> <p>Students have the power to choose.</p> <p>Self-protection takes knowledge, skill, and intention.</p>	<p>What is Health?</p> <p>What prevents people from practicing healthy behavior?</p> <p>What is sexual health?</p> <p>Who or what influences decisions about sexuality?</p>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Teacher Observation</li> <li>• Journal</li> <li>• Lesson check up questions</li> <li>• Participation in class discussions</li> </ul> <p><b>Formal Assessment:</b></p> <ul style="list-style-type: none"> <li>• Concept Review worksheets</li> <li>• Section review &amp; quizzes</li> <li>• Reteaching worksheet</li> <li>• Unit test</li> <li>• Describe your life goals for the future, and how you will stay on track. What are some of the stumbling blocks you may encounter, and how will you overcome them? Explain why this plan is the best for you and your life goals!</li> </ul>

Standards Alignment	Big Ideas	Essential Questions	Assessments
health.			
<b>Unit Six: Healthy Relationships (DE Model Unit)</b> <b>Timeline: 3 weeks</b>			
<p><b>Standard 1</b> –Students will understand essential health concepts in order to transfer knowledge into healthy actions for life.</p> <p><b>Standard 2</b> – Students will analyze the influence of family, peers, culture, media, technology and other factors on health behaviors.</p> <p><b>Standard 4</b> – Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.</p> <p><b>Standard 7</b> – Students will demonstrate the ability to practice health-enhancing and avoid or reduce health risks. (self-management)</p> <p><b>Standard 8</b> – Students will demonstrate the ability to advocate for personal, family, and community health.</p>	<p>Health is personal power.</p> <p>Decisions and choices that we make about our behaviors directly influence our health and the health of others.</p> <p>If we understand that respect for ourselves and others is a personal responsibility, we can learn to make better decisions and choices.</p> <p>We must choose not to support abusive or disrespectful behaviors.</p>	<p>What is Health?</p> <p>What prevents people from practicing healthy behavior?</p> <p>How do I recognize and practice healthy relationships?</p> <p>How do my decisions and choices influence my relationships and those of others?</p>	<p><b>Informal:</b></p> <ul style="list-style-type: none"> <li>• Teacher Observation</li> <li>• Journal</li> <li>• Lesson check up questions</li> <li>• Participation in class discussions</li> <li>• Student self assessment and reflection</li> </ul> <p><b>Formal Assessment:</b></p> <ul style="list-style-type: none"> <li>• Concept Review worksheets</li> <li>• Section review &amp; quizzes</li> <li>• Reteaching worksheet</li> <li>• Unit test</li> <li>• Transfer task</li> <li>• Informational pamphlet</li> <li>• Rubrics</li> <li>• Compare/contrast statement on abuse vs. equal power in a relationship.</li> <li>• Five-paragraph essay deconstructing a media message.</li> </ul>



community, their country, and their world to examine if human nature has indeed changed or if it has only retreated into different forms.

As an extension of this unit, Newark Charter will utilize extended readings of fiction, non-fiction and time period pieces to advance students' concept knowledge of this specific time in history as well as assist them in making the connection between history and their paths to global competency and awareness. These additional readings will provide students with increased academic rigor in both concept and content and opportunities to dive deeper into the rich literary history of our time. The instructional materials (graphic organizers, assessments, journal prompts, etc.) that are provided in the published unit can be modified to go with any additional literature.

The performance tasks will remain essentially the same with a small adjustment. The literary magazine, "Personal Reflections" will be an on-line publication. This change opens the assignment to more techno-savvy teens who might consider recording spoken word poetry, rap lyrics, digital story-telling, and other dynamic formats of writing. Written versions of these dynamic formats will be required to help the students assessing these items. In addition, the theme of the magazine will be slightly different, since the literature of the unit did not deal with insights of human nature at various stages of development. Instead, in the Newark Charter unit, an upcoming issue will deal with insights on human nature through the relationship of social groups and how we treat one another. This will allow students to take various perspectives based on their own experiences. The assessment rubric and student feedback form will remain the same.

## Stage 1 – Desired Results

What students will know, do, and understand

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### Common Core State Standards

CC 9-10 RL 2

CC 9-10 RL 4

CC 9-10 RL 6

### Big Idea(s)

Great literature provides rich and timeless insights into the key themes, dilemmas, and challenges that we face. It presents complex stories in which the inner and outer lives of human beings are revealed.

Often the intent of an author of fiction is to expose the truth about human nature.

Readers are able to recognize their own thoughts and behaviors in literary characters.

Prior experiences influence a reader's perceptions and insights about their reading: As a result, a reader's response to text is an individually unique experience.

## Unit Enduring Understanding(s)

*Students will understand that...*

- Often the intent of an author of fiction is to expose the truth about human nature.
- Readers are able to recognize their own thoughts and behaviors in literary characters.
- **Prior experiences influence a reader's perceptions and insights about their reading: As a result, a reader's response to text is an individually unique experience.**

## Unit Essential Questions(s)

Thematic questions

- How can a literary piece of text reveal truth?
- How does literature reveal us to ourselves?
- How do a reader's experiences influence his/her response to text?

## Knowledge and Skills

*Students will know...*

- an author chooses to write from any of the following points of view: 1<sup>st</sup> person, 3<sup>rd</sup> person limited, 3<sup>rd</sup> person objective, 3<sup>rd</sup> person omniscient points of view.
- characterization is the process through which an author develops the qualities **and personalities of a story's** characters.
- an author may develop the characters directly or reveal them indirectly through actions, speech, thoughts, or the reactions of other characters.

*Students will be able to...*

- identify the point of view of a literary selection.
- **explain the influence of a writer's choice of point of view on the reader.**
- **explain the reasons for a character's actions.**
- utilize a specific point of view to impact a reader's reactions.

## Stage 2 – Assessment Evidence

Evidence that will be collected to determine whether or not Desired Results are achieved

### Suggested Performance/Transfer Task(s)

#### Performance Task #1

***That was then - This is now . . .***

You are a freelance writer who is interested in submitting a piece of your original writing to the literary magazine, ***Personal Reflections***. You have been informed that an upcoming issue of the magazine will feature poems, song lyrics, narratives, and reflection journals which deal with insights about human nature at various **stages of a human being's development**. You have decided to **create a literary piece** (a poem, a song, a narrative, or a reflection journal) which expresses an insight you

have about individuals in a particular stage of their growth, and then submit it to the Editorial Board of that magazine for approval. You will need to determine the genre in which you wish to work, the point of view from which you will write, and the ways in which you will convey your insight. You will want to consider how the point of view you selected will impact on the insight you want to express, as well as how it will affect the readers of the magazine. You will also want to be sure that you develop any characters (including the speaker/narrator) so that their words, actions, and feelings contribute to the expression of the insight about human nature.

**Goal – Express a truth about human nature at a specific age.**

**Role – Freelance Writer (Poet, song writer, short story writer, reflection journal etc.)**

**Audience – Editorial Board of a Literary Magazine**

**Situation – Creating a literary piece appropriate for submission for an upcoming issue of the literary magazine, *Personal Reflections***

**Product – Poem, Song, Narrative, or Reflection Journal**

**Standards – See attached rubric.**

## **Performance Task #2**

### ***Feedback from the Editorial Board***

You serve on the Editorial Board of the literary magazine, *Personal Reflections*. It is your job to provide feedback to the writers who have submitted pieces to be considered for publication in an upcoming issue. The magazine has devised a feedback form which provides the structure for giving the writers specific reactions and suggestions for revision. You will be reading and evaluating three pieces of writing which have been sent to the magazine. Your job is to consider each piece in light of the criteria established on the Feedback Form. You will then complete a Feedback Form for each piece of writing, providing your responses and suggestions for revisions to the writer.

**Goal – Evaluate the effectiveness of literary pieces submitted for consideration for the “*That Was then – This is now...*” issue of the magazine, *Personal Reflections*.**

**Role - Editor**

**Audience – Writers of literary pieces submitted for publication**

**Situation – Giving feedback to writers about the effectiveness of their writing in conveying an insight about human nature at a specific age**

**Product – Feedback Forms for Three Literary Submissions**

**Standards – See Appendix for Feedback Form.**

## ***That was then – This is now....*** **Performance Task #1 Rubric**

**4**

**3**

**2**

**1**

The writer

The writer

The writer

The writer

## **Genre**

selected a genre that is especially appropriate for expressing the insight about human nature.

selected a genre that is appropriate for expressing the insight about human nature.

selected a genre that is minimally appropriate for expressing the insight about human nature.

selected a genre that is not appropriate for expressing the insight about human nature.

## **Point of View**

The point of view is clearly and consistently established; it strongly impacts the **reader's** understanding.

The point of view is clearly established and has impact on **the reader's** understanding.

The point of view is suggested but has little impact **on the reader's** understanding.

The point of view is unclear and has no impact on the **reader's** understanding.

## **Character Development**

The characters are fully developed through their words, actions, thoughts and feelings, and/or **others' reactions**; this development strongly influences the **reader's** understanding.

The characters are developed through their words, actions, thoughts and feelings, and/or **others' reactions**; this development influences the **reader's** understanding.

The characters are partially developed through their words, actions, thoughts and feelings, or **others' reactions**; this development minimally influences the **reader's** understanding.

The characters are not developed through their words, actions, thoughts and feelings, or **others' reactions**; as a result, they have little influence on the **reader's** understanding.

## **Other Evidence**

(e.g., tests, quizzes, prompts, work samples, observations)

1. **Character Development Organizer—for the story, "Checkouts"** (See Appendix.)
2. **Quizzes**—on use of context clues to determine meanings of unfamiliar words and identification of point of view
3. **Unit Assessment**—on use of context clues to determine meanings of unfamiliar words, the influence of point of view on a reader, and methods of character development with a new reading selection ("The Crush") (See Appendix.)


**Stage 3 – Learning Plan**  
(Design learning activities to align with Stage 1 and Stage 2 expectations)

**Key learning events needed to achieve unit goals**

Learning Activities: What learning experiences and instruction will enable students to achieve the desired results? How will the design

W = Help the students know Where the unit is going and What is expected? Help the teachers know Where the students are coming from (prior knowledge, interests)

H = Hook all students and Hold their interest?

E = Equip students, help them Experience the key ideas and Explore the issues?

R = Provide opportunities to Rethink and Revise their understandings and work?

E = Allow students to Evaluate their work and its implications?

To = Be Tailored (personalized) to the different needs, interests, and abilities of learners?

O = Be Organized to maximize initial and sustained engagement as well as effective learning?

1. Begin with the following journal prompt to encourage students to think about human behavior which might be typical of a certain age.

"This is often the way of children, when they truly want a thing, to pretend that they don't. And then they grow angry when no one tried harder to give them this thing they so casually neglected . . . Humans are very complicated."

Ask students to write a response to this prompt, recalling a time when this quote would appropriately have described their own behavior. **H**

2. In a "structured pairs" activity have students read their journal entries to each other and complete the three-column response sheet below for their partners. **E**

Your journal entry reminds me of . . .	Your journal entry makes me wonder if . . .	Your journal entry makes me think that people . . .
--	---	---

3. Introduce the essential questions for this series of lessons and have students discuss their own and their partners' experiences (as revealed in their journal entries) in light of these questions. **W**
4. In preparation for reading *Breaking the Ice*, by Dave Barry, have students explore the first time they tried to make conversation with a person of the opposite sex (through phone calls, encounters in hall, notes during class, etc.). **H, T**
5. Tell students they are going to be reading an adult's advice to young

people as he remembers his first encounters with the opposite sex. As they read, they will be responding on a similar organizer to the one they used with their journal reflections. **E, O**

This piece of text reminds me of . . .

This piece of text makes me wonder if . . .

This piece of text makes me think that people . . .

6. Ask students to share their reactions which they recorded, and record them on a transparency of the organizer. **E, O**
7. Using what has been recorded on the transparency, elicit from students **their "take" on Dave Barry's point of view regarding this topic. Have them brainstorm characteristics of his perspective (i.e., tone, humor, language, situation, word choice, exaggeration, use of dialog, etc.). Ask them to identify the point of view of this piece (1<sup>st</sup> person). E**
8. **Guide them to answer the questions: What impact did the fact that he's an adult have on his treatment of the topic? What truths about human nature does Barry seem to be expressing? What is the effect of his use of the 1<sup>st</sup> person point of view? R**
9. Introduce the next reading as another literary piece which deals with a similar topic from a different point of view. Ask students to recall a time when a big change occurred in their lives such as moving to a new town, a new school. Explain that the next story is about such a time in an **adolescent's life, a time when a teenager new to town is looking for a friendship with a member of the opposite sex. E, T**
10. Prepare students for the experience of encountering a piece of text about a similar topic which utilizes a different level of word choice. Explain that effective readers have strategies that they use to meet the challenge of understanding unfamiliar words. One of those strategies involves utilizing the language around the unfamiliar words to discern likely meanings (context clues). **E**
11. Project on the overhead a paragraph that incorporates the topic of this next piece (a big change in the life of an adolescent) along with some of the challenging vocabulary they will encounter in that piece of text. Direct students to read the paragraph silently to get the general sense of the paragraph even though there may be words they do not know. **E**

***Sample text with unfamiliar vocabulary***

I was staring dreamily out of the bus window in a reverie about the life I was leaving behind. My intuition told me that it would be some time before I felt comfortable in this new life I was about to begin. The shards of my past flashed through my mind – **my best friend's last birthday party, summer camp** memories, my neighborhood park . . . . I looked over at my mother who had a harrid expression on her face; she was obviously burdened with all the tedious details of moving. I felt a perverse delight in knowing this move was hard on

**her, as well. I wasn't brazen** enough to tell her what I was thinking, but I suspected she could see it. Outwardly, my **dishevelment** reflected my inner turmoil. For once, I was not **articulate**; my typical tendency to talk about everything had disappeared as an underlying anxiety **lingered** in the back of my mind.

12. Next, project the same paragraph with blanks in place of the target vocabulary. (See below.) Give students a sheet of paper with pairs of words. Explain that each pair includes a synonym and an antonym for one of the missing words in the paragraph. In groups of three, students should select the most appropriate word for each blank, capturing the same sense from the original paragraph. Encourage students to talk about their decision-making with each other. Share the results and explore the skill of using context clues as a strategy for understanding unfamiliar words. **E, O**

***Sample text with blanks in place of unfamiliar vocabulary***

I was staring dreamily out of the bus window in a \_\_\_\_\_ about the life I was leaving behind. My \_\_\_\_\_ told me that it would be some time before I felt comfortable in this new life I was about to begin. The \_\_\_\_\_ of my past flashed through my mind – my **best friend's last birthday party, summer camp** memories, my neighborhood park . . . . I looked over at my mother who had a \_\_\_\_\_ expression on her face; she was obviously burdened with all the \_\_\_\_\_ details of moving. I felt a \_\_\_\_\_ delight in knowing this move was **hard on her, as well. I wasn't** \_\_\_\_\_ enough to tell her what I was thinking, but I suspected she could see it. Outwardly, my \_\_\_\_\_ reflected my inner turmoil. For once, I was not \_\_\_\_\_; my typical tendency to talk about everything had disappeared as an underlying anxiety \_\_\_\_\_ in the back of my mind.

***Synonyms and antonyms for unfamiliar vocabulary*** (Not in order of appearance in the paragraph)

natural	unnatural
instincts	intellect
exciting	boring
remained	rushed
fragments	Sum
speechless	expressive
messiness	neatness
panic	trance
shy	Bold
worried	carefree

13. Now that students have some familiarity with the new vocabulary they will encounter, ask them to read the first two paragraphs of the story, **"Checkouts" by Cynthia Rylant**. (A similar process could be used with any story written from the point of view of an adolescent dealing with an unwelcome change in his/her life.) Have students read to find out how this girl felt about moving to a new place. Ask students to share the words and phrases which clued them into her perspective about the move. **E**
14. Ask students to compare the first person point of view they saw at work in \_\_\_\_\_

Dave Barry's "Breaking the Ice" with the third person point of view they are encountering in this story. Ask students to identify the particular type of 3<sup>rd</sup> person point of view used in "Checkouts." What special characteristic does that type of 3<sup>rd</sup> person point of view possess? (Omniscience) Have students suggest how both of those points of view have been used to reveal the insights of the writer. Ask them to make predictions about how the age and perspective of the person through whose eyes the selection is written, seems to have influenced the piece. **E, R**

15. With those predictions in mind, have students continue reading "Checkouts," to discover what insight about an adolescent's adjustment to change the writer might be conveying. **R**
16. Explain that in order for a writer to convey an insight about human nature, he/she often combines the selection of a particular point of view with the development of his/her characters to reveal that insight. To develop students' understanding of a writers' character development, explain that characterization is the process through which an author develops the qualities and personalities of a story's characters. An author sometimes describes the characters directly, but often shows their traits more indirectly through the characters' words, thoughts, and/or actions, as well as through the reactions of others around them. Have students recall their reading of Dave Barry's "Breaking the Ice." Display the transparency of selected lines from his essay (see attached) which demonstrate how he developed the qualities and personality of the character in his piece. Have students label these lines as the character's own words, own thoughts, own actions, or others' reactions. **E**
17. Ask students to consider the girl and the boy in the story "Checkouts;" specifically, their words, actions, and thoughts as revealed by the writer, and their reactions to each other. Have students complete the Character Development Organizer, finding specific lines from the story which reflect identified character traits, as they analyze these two characters. **E, O**
18. Have students share their observations about the characters and guide students to understand that the writer's development of these characters (combined with the selected point of view) serves to convey her insight about human nature in adolescence. **R**
19. Ask students to think of another literary selection they have previously read, heard read aloud, or viewed in film form which led them to recognize some "truth" about themselves. Have students write a reflection journal which explores that experience. Provide the following questions and accompanying rubric to guide their exploration:
  - o What was that piece of literature? What was the "truth" you recognized about yourself?
  - o How did the point of view and/or the character development in this literary selection influence your perceptions and insights?
  - o What was your response to the recognition of this "truth" about yourself? **E-2**
20. Explain to students that they are now going to have an opportunity to develop their own pieces of expressive writing in which they utilize what they have seen other writers do through point of view and character development. Give students a copy of **Performance Task #1 – That Was Then...This is Now**. Go over the G.R.A.S.P.S elements of the task. Provide students with a copy of the rubric and clarify any questions, concerns, etc. Also, show students **Performance Task #2 – Feedback from the Editorial Board**. Explain that when they have finished their original pieces

- of writing, they will then serve as a member of the Editorial Board, giving feedback to three of their peers, using the same rubric. **E-2, T, O**
21. Following the drafting and editorial review process, have students revise their expressive writing pieces and submit for evaluation. **R, E-2**
22. As a final evaluation for this unit, give students copies of the story, "A Crush" by Cynthia Rylant and the accompanying assessment; ask students to complete the assessment with this new piece of text. **E-2**

### Code

*IP = international education perspective*

*IL = information literacy*

*WR = Workplace readiness/21<sup>st</sup> century skills*

*FA = a formative assessment, used to check for understanding*

## Resources and Teaching Tips

- **What text/print/media/kit/web resources best support this unit?**

Barry, Dave. "Breaking the Ice," *Literature and Integrated Studies: Forms In Literature*. Glenview, Illinois: Scott, Foresman, and Company, 1997, 58-61.

Rylant, Cynthia. "Checkouts," *Literature and Integrated Studies: Forms in Literature*. Glenview, Illinois: Scott, Foresman, and Company, 1997, 46-51.

Rylant, Cynthia. "A Crush," *The Language of Literature*. Evanston, Illinois: McDougal Littell, 2002, 68-74.

***Also see Appendix for print resources in the form of printed originals.***

### Differentiation

Differentiation is addressed throughout the unit.

APPENDIX  
Printed Originals for Use in Classroom  
***(including transparencies, graphic organizers, activity handouts, and unit assessment)***

***Sample text with unfamiliar vocabulary***

**I was staring dreamily out of the bus window in a reverie about the life I was leaving behind. My intuition told me that it would be some time before I felt comfortable in the new life I was about to begin. The shards of my past flashed through my mind – my best friend’s last birthday party, summer camp memories, my neighborhood park . . . . I looked over at my mother who had a harried expression on her face; she was obviously burdened with all the tedious details of moving. I felt a perverse delight in knowing this move was hard on her, as well. I wasn’t brazen enough to tell her what I was thinking, but I suspect she could see it, Outwardly, my dishevelment reflected my inner turmoil. For once, I was not articulate; my typical tendency to talk about everything had disappeared as an underlying anxiety lingered in the back of my mind.**

***Sample text with blanks in place of unfamiliar vocabulary***

**I was staring dreamily out of the bus**

window in a \_\_\_\_\_ about the life I was leaving behind. My \_\_\_\_\_ told me that it would be some time before I felt comfortable in the new life I was about to begin. The \_\_\_\_\_ of my past flashed through my mind – my best friend’s last birthday party, summer camp memories, my neighborhood park . . . . I looked over at my mother who had a \_\_\_\_\_ expression on her face; she was obviously burdened with all the \_\_\_\_\_ details of moving. I felt a \_\_\_\_\_ delight in knowing this move was hard on her, as well. I wasn’t \_\_\_\_\_ enough to tell her what I was thinking, but I suspect she could see it, Outwardly, my \_\_\_\_\_ reflected my inner turmoil. For once, I was not \_\_\_\_\_; my typical tendency to talk about everything had disappeared as an underlying anxiety \_\_\_\_\_ in the back of my mind.

***Synonyms and Antonyms for Unfamiliar Vocabulary***

**(not in order of appearance in the paragraph)**

<b>Natural</b>	<b>unnatural</b>
<b>Instincts</b>	<b>intellect</b>
<b>Exciting</b>	<b>boring</b>
<b>Remained</b>	<b>rushed</b>
<b>Fragments</b>	<b>Sum</b>
<b>Speechless</b>	<b>expressive</b>
<b>Messiness</b>	<b>neatness</b>
<b>Panic</b>	<b>trance</b>
<b>Shy</b>	<b>Bold</b>
<b>Worried</b>	<b>carefree</b>

## **CHARACTERIZATION**

**Selected Lines from "Breaking the Ice" by Dave Barry**

**Directions:** Read the following lines from "Breaking the Ice." These lines help you get to know the main character (the narrator of the essay). Identify each item as an example of the character's own words, own thoughts, own actions, or others' reactions which give you insight about the kind of person the narrator is.

1. "Starting in about eighth grade, my time was divided as follows:

*Academic Pursuits: 2 percent*

*Zits: 16 percent.*

*Trying to Figure Out How to Ask Girls Out: 82 percent". \_\_\_\_\_*

2. "I spent the vast majority of 1960 keeping a girl named Judy under surveillance...." \_\_\_\_\_

3. "I knew ... that there was always the possibility that the girl would say no, thereby leaving me with no viable option but to leave Harold C. Crittenden Junior High School forever and go into the woods and become a bark-eating hermit whose only companions would be the gentle and understanding woodland creatures."  
\_\_\_\_\_

4. "Judy: Hi.

Me: Hi.

Judy: Just in case you have ever thought about having a date with me, the answer is no.

Woodland Creatures:

HAHAHAHAHAHA." \_\_\_\_\_

5. "I spent the whole time wondering whether it would be necessary to amputate my right arm, which was not getting any blood flow as a result of being perched for two hours like a petrified snake on the back of Judy's seat exactly one molecule away from physical contact."  
\_\_\_\_\_

## CHARACTER DEVELOPMENT ORGANIZER

for "Checkouts" by Cynthia Rylant

CHARACTER'S TRAITS	DIRECT DESCRIP.	OWN WORDS	OWN THOUGHTS	OWN ACTIONS	OTHERS' REACTIONS
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**Character:**

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**Personality Traits:**

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**Character:**

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**Personality Traits:**

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**Insight Conveyed About Human Nature in Adolescence:**

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***From the Writer to the Reader***

**UNIT ASSESSMENT**

**Part I – Directions:** Read each of the following sentences. The underlined words in the sentences may be unfamiliar to you. Use the

other words and phrases within the sentences (*context clues*) to help you figure out the likely meanings of the unfamiliar words. Answer the multiple choice item after each sentence, which asks you to tell what you have been able to figure out about the unfamiliar word.

1. *The Boy Scout impaled the marshmallow on the stick by shoving the small branch through its center.*

In the sentence above, impaled means-

- A. stuck
- B. tasted
- C. packaged
- D. lifted

2. *He tried to coax the small kitten to eat by gently holding a small bit of cat food up to its mouth.*

In the sentence above, coax means-

- A. force
- B. encourage
- C. prevent
- D. allow

3. *The museum employee ushered the group through the exhibits, explaining all the important displays as he took them through the tour.*

In the sentence above, ushered means-

- A. pushed
- B. left
- C. followed
- D. guided

4. *Because she didn't want him to be embarrassed, his mother tried to straighten his tie discreetly before his date for the prom returned.*

In the sentence above, discreetly means-

- A. angrily
- B. cautiously
- C. silly
- D. simply

5. *Those bushes should survive the cold, winter weather because they are very hardy.*

In the sentence above, hardy means-



**Part III –**

**Directions:** Select one of the characters in the story, “A Crush” (Dick, Dolores, Ernie, or Jack) and analyze how the author developed that character to reveal an insight about human nature. Use the *Character Development Organizer* below to record the evidence you gather from the story to illustrate the personality trait(s) of that character. Then write a 2-3 sentence explanation of the insight about human nature revealed by the author through that character.

**CHARACTER DEVELOPMENT ORGANIZER  
for “A Crush” by Cynthia Rylant**

<b>CHARACTER'S TRAITS</b>	<b>DIRECT DESCRIP.</b>	<b>OWN WORDS</b>	<b>OWN THOUGHTS</b>	<b>OWN ACTIONS</b>	<b>OTHERS' REACTIONS</b>
-------------------------------	----------------------------	----------------------	-------------------------	------------------------	------------------------------

Character:

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Personality  
Traits:

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**Insight Conveyed About Human Nature:**

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## **UNIT ASSESSMENT**

### **Scoring Tools**

#### ***Part I –***

- 1. A – stuck**
- 2. B – encourage**
- 3. D – guided**
- 4. B – cautiously**
- 5. D – strong**
- 6. D – dry up**

#### ***Part II – Holistic Rubric***

##### **3**

- **Accurately identifies point of view as 3<sup>rd</sup> person omniscient.**
- **Explains in detail the influence of this point of view on the reader.**
- **Provides appropriate and substantial textual support for ideas.**
- **Makes connections to the author’s insight about human nature.**

##### **2**

- **Identifies point of view as 3<sup>rd</sup> person.**
- **Explains the influence of this point of view on the reader.**
- **Provides appropriate textual support for ideas.**

##### **1**

- **Inaccurately identifies point of view.**
- **Explains own response to the selection.**
- **Mentions details from the story.**

## **Part III – Analytic Rubric**

	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
<b>Choice of Character</b>	Selects and consistently focuses on one of the four main characters.	Selects and generally focuses on one of the four main characters.	Selects one of the four main characters.	Considers more than one character.
<b>Identification of Personality Traits</b>	Identifies personality traits that are true of the character selected and significant reflections of human nature.	Identifies personality traits that are true of the character selected and, for the most part, reflections of human nature.	Identifies one personality trait that is true of the character selected.	<b>Does not identify or inaccurately identifies personality trait(s) of characters.</b>
<b>Gathering of Evidence of Character Development</b>	Accurately gathers quality textual evidence of the author's techniques for developing that character.	Gathers textual evidence of the author's techniques for developing that character.	Gathers some textual evidence of the author's techniques for developing that character.	<b>Gathers inaccurate or no textual evidence of the author's techniques for developing characters.</b>
<b>Understanding of Author's Insight</b>	Clearly and perceptively expresses the author's insight about human nature as revealed through the development of that character.	Generally expresses the author's insight about human nature as revealed through the development of that character.	Suggests an understanding of the author's insight about human nature through the development of that character.	<b>Lacks understanding of the author's insight about human nature through the development of any character.</b>

# ***Reflection Journal***

## **Rubric**

### **3**

- **Identifies a piece of literature which they have read, heard read aloud, or viewed in film form which led them to recognize a "truth" about themselves.**
- **Explains that insight fully, including how the point of view and character development of the piece influenced their perceptions and insights.**
- **Explores the experience in detail, describing their response to the insight.**

### **2**

- **Identifies a piece of literature which they have read, heard read aloud, or viewed in film form which led them to make connections with themselves.**
- **Explains those connections, including how the point of view or the character development of the piece influenced their thinking.**
- **Explores the experience, describing their response to those connections.**

### **1**

- **Identifies a piece of literature which they have read, heard read aloud, or viewed in film form.**
- **Mentions the point of view and/or the character development of the piece.**
- **Describes their reaction to the piece of literature.**

## **Feedback from the Editorial Board Performance Task #2 – Feedback Form**

Writer \_\_\_\_\_ Peer Evaluator \_\_\_\_\_

**Genre**

- What genre did the writer choose for his/her writing?
- Is the genre appropriate for the purpose of this task? Why or why not?

**Point of View**

- What point of view did the writer select?
- How did this choice of point of view impact you as the reader? Why?
- Was the point of view maintained consistently? How do you know?

**Character Develop.**

- How were the characters developed (words, actions, thoughts and feelings, others' reactions)?
- How did the characters influence your understanding of the writer's insight about human nature?

**Insight about Human Nature**

- What insight about human nature was expressed through this piece of writing?
- What factor listed on this form most strongly influenced your understanding of the writer's insight? Why?

## Delaware Model Unit Gallery Template

This unit has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model unit has undergone a rigorous peer review and jurying process to ensure alignment to selected Delaware Content Standards.

**Unit Title:**            **Our Brother's Keeper?  
*Of Mice and Men***

**Designed by:**        **Rebecca Sharp, Pat Clements, Ann Lewis**  
**Modified by Sharon McMahon, Innovative Schools**

**Content Area:**        **ELA**

**Grade Level(s):**    **Ninth Grade**

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### Summary of Unit

**This ninth grade language arts unit addresses an author's development of character with a focus on the use of language to reveal the motivations, values and beliefs of characters. Students are expected to analyze a character and assume his/her persona, explaining his life before, during and after the time frame represented in the text. Thematically, this unit explores the impact of the values of an era on the portrayal of characters and the circumstances of their lives as shown through text that grew out of the era. Although other literary concepts may be discussed throughout the unit, the focus and assessments of this unit reflect characterization, the readers' connections with text, and text-to-text connections.**

### **502 Unit: *Of Mice and Men* Modifications for Newark Charter School**

*Of Mice and Men* is one of the great literary texts of the 20<sup>th</sup> century and magnificently portrays what life was like for migrant workers during the Great Depression. As in other texts read in this course on American Literature, the characters in the story are products of their society and culture. In addition, Steinbeck challenges the reader by including the notion of disability and difference – through Lennie, of course, but also through Curley's wife, Crooks, and Candy. This American classic has lessons for all students from every background. In the Newark Charter School English curriculum, *Of Mice and Men* will be taught in tandem with a social studies unit on the Great Depression. To make this unit more applicable for Newark Charter School students and their path to global competency and leadership, minor modifications will be made.

Newark Charter will utilize extended readings of fiction, non-fiction and time period pieces to advance students' concept knowledge of this specific time in history as

well as assist them in making the connection between history and their paths to global competency and awareness. These additional readings will provide students with increased academic rigor in both concept and content and opportunities to dive deeper into the rich literary history of our time.

In addition to utilizing the film version of the novel after reading the story, the Newark Charter curriculum will extend the notion of “being my brother’s keeper,” introduced through the use of *Radio* and “Someone to Lean On,” by including selected speeches from President Obama. Throughout his presidential campaign President Obama used the phrase, “I am my brother’s keeper. I am my sister’s keeper” when talking about our obligation to each other as human beings. He is a role model for all students, and indeed the nation, as he advocates a departure from the comfort of our self-absorbed perspectives, to an attitude of compassion and caring for each other. Through his words, students will be asked to look around their community, nation, and world to see how people treat those on the margins – those who live with a disability or difference, those within poverty, or those who live otherwise isolated from others. A hopeful outcome of this extension will be student writing or other avenue that persuasively addresses issues of social justice and political action.

## Stage 1 – Desired Results

What students will know, do, and understand

### Common Core State Standards

CC 9-10 RL 1  
CC 9-10 RL 2  
CC 9-10 RL 3  
CC 9-10 RL 4  
CC 9-10 RL 5  
CC 9-10 RL 8  
CC 9-10 RL 9  
CC 9-10 RL 10  
CC 9-10 W 9a  
CC 9-10 W 9b  
CC 9-10 W 3a

### Big Idea(s)

**Great literature provides rich and timeless insights into the key themes, dilemmas, and challenges that we face. It presents complex stories in which the inner and outer lives of human beings are revealed.**

### Unit Enduring Understanding(s)

*Students will understand that...*

- Authors place their characters in believable situations, where they face difficult decisions.
- The solution to a problem often reflects the values of the era.
- A writer’s word choice and syntax are characteristics of voice that help to personalize text.
- Reading helps us form our opinions.

### Unit Essential Questions(s)

- How does an author make characters seem real?
- Can a wrong action ever be right?
- What responsibility do we have for each other’s welfare?

### Knowledge and Skills

*Students will know...*

- that writers convey characters’ attitudes and beliefs through character development.
- that writers use language to help the reader develop a rich image of the character’s world.

*Students will be able to...* (21<sup>st</sup> century skills)

- analyze a character’s motivation, beliefs and values in order to assume a persona.
- plan, organize, and create a graphic depiction of a character’s life, explicit and inferred.
- relate themes, dilemmas, and challenges found in a novel to other real-life situations.

## Stage 2 – Assessment Evidence

Evidence that will be collected to determine whether or not Desired Results are achieved

### Suggested Performance/Transfer Task(s)

**1. IT’S MY LIFE!** - Imagine you are one of the characters in *Of Mice and Men*. Create a scrapbook that depicts your life before, during and after the time portrayed in this novel. This scrapbook should reflect major events, feelings and relationships in your life -- those that were revealed in the book and those that may have happened before or after the events of the book. The end result should provide an image through which those close to you can really come to “know” you as a person. This scrapbook can contain pictures, mementos, journal entries, captions or other appropriate memorabilia. This task will be capstoned by your presentation of the scrapbook to the class, speaking as your character. Your understanding will be assessed by the attached rubric.

G: Reflect character’s motivation and predict his actions

R: A character in *Of Mice and Men*

A: A family member or close friend

S: Creating a scrapbook chronicling a character’s life, real and inferred

P: Scrapbook

S: See rubric

2. **WHOSE BEST INTEREST?** - Imagine you are a member of a town council. The council is facing a difficult zoning decision. A new prison will be constructed in your town. The town council must select the best location for this prison from among four available sites in the town: next to a nursing home, next to an elementary school, on the marshlands near the town park, or in the neighborhood where you live. As a council member, you will be attending an upcoming meeting, during which each council member must present his recommendation for the site to be selected. Write a speech advocating your choice of site for the prison and supporting your thinking.

G: To persuade others to understand and accept your choice

R: Town council member

A: Other council members and the community members attending the meeting

S: Selecting an appropriate site for a prison

P: Speech

S: Locating, analyzing and evaluating information, formulating and supporting an opinion (This will be scored using the Delaware State Writing Rubric.)

**Rubric for Transfer Task #1- *IT'S MY LIFE***

	4	3	2	1
<b>The Novel</b>	Scrapbook provides a complete, insightful understanding of the novel.	Scrapbook provides a thorough understanding of the novel.	Scrapbook provides partial understanding of the novel.	Scrapbook provides little understanding of the novel.
<b>The Character</b>	The memorabilia as presented shows a perceptive understanding of the character's motivations, actions, values and beliefs.	The memorabilia as presented shows a complete understanding of the character's motivations, actions, values and beliefs.	The memorabilia as presented shows a partial understanding of the character's motivations, actions, values and beliefs.	The memorabilia as presented shows little understanding of the character's motivations, actions, values and beliefs.
<b>The Persona</b>	The presentation shows a perceptive, accurate, believable depiction of the character before, during and after	The presentation shows an accurate, believable depiction of the character before, during and after the novel.	The presentation shows a partial depiction of the character before, during and after the novel.	The presentation shows limited depiction of the character before, during and after the novel.

	the novel.			
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### Transfer Task #2 – *WHOSE BEST INTEREST?*

Use Delaware State General Rubric for Writing (in appendix).

### Other Evidence

(e.g., tests, quizzes, prompts, work samples, observations)

- Character Notes graphic organizer
- Three-Column Notes (Use of Language in *Of Mice and Men*) organizer
- Personal Response Essay (See holistic rubric in appendix for evaluating these personal responses.)
- Persuasive speech to the jury (See adapted Delaware State General Rubric for Writing in appendix for use with this assessment.)
- Character Interview Responses - Each student in the class will select an interview question for his/her chosen character to explore. Writing as that character, they will create a possible response to the question. They will be writing in the first-person point of view, as that character. They will use everything they understand about the character (the character's thinking, his/her motivation, his/her way of expressing himself, etc.) to help them formulate a response to the question.

### Student Self-Assessment and Reflection

## Stage 3 – Learning Plan

(Design learning activities to align with Stage 1 and Stage 2 expectations)

### Before Reading Activities (*Of Mice and Men*):

1. Show students video clips or photographs from the 1930's in America. Ask them to identify the time period and offer any previous impressions they may have about that era in American history. H
2. Using available resources, lead students in an investigation to establish background knowledge concerning what life was like in the 1930's for migrant workers. This may include an internet search on the 1930's and/or the Great Depression. W, E-1, H
3. Introduce any vocabulary reflective of the 1930's setting which may be unfamiliar to the students. Have students offer current vernacular counterparts to these words. E-1
4. Ask students to extend their thinking and brainstorm what they believe it would have been like to be a person with a disability (physical, mental, or emotional)

and few financial or family resources, during this era in our country's history. As students predict what problems such a person might encounter, record those predictions on the board or overhead on the left side of a T-chart. (See appendix for sample T-chart.)

5. Share with students one or more textual accounts of what it is like to live in today's world with a disability (physical, mental, or emotional). (See appendix for one possibility of text sample, "It's OK to Be Different," an account of a person living with cerebral palsy.)
6. Have students then think-pair-share with a partner what it might have been like for that person if he/she had been living during the 1930's and had very few financial or family resources. Encourage students to refer to those predictions they had made on the T-chart. E-1, O
7. Introduce the novel, *Of Mice and Men*, as a story of just such a person – an individual living with a disability during the 1930's, whose life takes a dramatic turn as a direct result of his disability and the era in which he lives. H,W

**During Reading Activities (*Of Mice and Men*):**

8. As students are reading the novel, prepare them for their focus on Steinbeck's characterization as it reflects the motivations, values, and beliefs of this segment of the American population during the Depression era, by involving students in the following types of learning experiences:
  - Have students maintain a list of language (word choice and sentence structure) typical of each character in the novel. Based on the context in which the language appears, have students record notes concerning the significance of each example. (See appendix for Three-Column Notes organizer.) E-1, O)
  - Have students keep a learning log reacting to their reading of each chapter. These responses to the key plot elements, character developments, etc. will guide students to reflect about their reading and make real-life connections with the text. They will also be a resource for the culminating performance task. E-1, R, E-2, O
  - Have students select one particular character in whom they have a special interest. Have them take notes on this character, focusing on the character's actions, reactions to others, thoughts etc. (See appendix for the Character Notes graphic organizer.) E, T, O
9. Using the Three-Column Notes, the Character Notes graphic organizer, and/or the learning logs of chapter response/reflections, have students meet in small expert groups to analyze chosen characters in terms of complexity and growth. (These expert groups might meet several times as they are reading the novel to give on-going consideration to questions such as the following:
  - a. What kind of person is \_\_\_\_\_? How do we know?
  - b. How has the time period in which he/she lives impacted his/her life?
  - c. What decisions has he/she made that have perhaps changed the course of his/her life?
  - d. Has this person grown in any way as the novel has progressed?

- e. How is \_\_\_\_\_ like a lot of other people? R, T, O
10. When students have finished the novel, have the expert groups jigsaw so that all new groups have an expert representative for each character. Have students share insights about the complexity and growth of the characters in the novel. R, T, O

11. Direct students to write a personal response reacting to George's actions in the final

chapter. Provide the following questions to prompt students' thinking:

- a. Were George's actions wrong or right? Why?
- b. What justification might be offered to support George's actions?
- c. Were there other solutions that might have been feasible? If so, what are they?

If not, what implications of the era in which the novel took place might have limited the choices the characters had? R, E-2

(See appendix for holistic rubric to evaluate student responses.)

12. Have students respond to the following writing prompt: R, E-2, T

Following Lennie's death, George was arrested and charged with his murder. Imagine that you are either the prosecutor trying to convict George of Lennie's death or the defense attorney trying to acquit him. Write a persuasive speech to the jury in which you give your closing argument in support of a guilty or not guilty verdict. Use insights from the novel to support your arguments.

After Reading Activities (*Of Mice and Men*):

13. Show students one or both film versions of *Of Mice and Men* and have them draw comparisons to the book. Have students consider questions such as,
- How did the actors portray the characters compared to how you envisioned them?
  - Were the language choices of the characters in the film true to those in print? (i.e., word choice, dialect, etc.) How were they similar? different?
  - How did the director's choice of cinematic techniques (blocking, costuming, props, set design, etc.) support/contradict what you had inferred about the nature of each character?
  - If you were the director of the film, how would you have changed it to better reflect your understanding of the characters?" R, E-2
14. To help students "get inside the head" of key characters, explain that they are going to imagine what it might be like to talk to these characters. Divide the class into groups, by character. Have each group develop a list of interview questions they would like to ask their character. Have the groups record their questions on poster paper to put up around the room. Ask each group to share their questions, adding any other that the rest of the class suggests. E-2, R, T, O

15. Have each student in the class select one of the questions for his/her chosen character to explore. Ask students to imagine that they are that character as they create a possible response to the question. They should write in the first-person point of view, as that character. Encourage students to use everything they understand about the character to help them formulate a response to the question. E-2, R, T
16. Introduce students to the expectations of Transfer Task #1- *It's My Life* by sharing the actual task and its accompanying rubric. Explain that everything they have done as they worked with text and film version(s) of the story have prepared them to know their characters inside and out. This scrapbook and its presentation should reveal that understanding. (See appendix for handouts of transfer task and rubric.)

**Transition/Before Reading** (“Someone To Lean On”/Radio):

17. Pose the essential question, “What responsibility do we have for each other’s welfare?” Have students suggest areas in which we may have taken on responsibility for each other in today’s world. Encourage them to identify some social and political issues which arise out of this concern (i.e., welfare, medical care in third world countries, organ donation, care of the homeless, etc.). Have students also suggest areas in which we may have abandoned or ignored responsibility for each other (i.e. breakdown of neighborhoods, focus on personal benefits rather than the good of the whole, political apathy, lack of concern for the environment, etc.) W, H
18. Ask students to apply that question to their previous reading of Steinbeck’s novel, *Of Mice and Men*. Have them consider what kind of support existed in the 1930’s for people like Lennie. How might things have been different for him if he were living in today’s world? W, H
19. Have students suggest any other books, stories, movies, etc. which they’ve read or seen that consider this question of our responsibility for each other. To guide them as they make these connections, encourage them to consider questions such as the following:
  - What aspects of *Of Mice and Men* reminded me of another book or film?
  - How was \_\_\_\_\_ (Book/Move Title) \_\_\_\_\_ like \_\_\_\_\_ (Character) *Of Mice and Men*?
  - How was \_\_\_\_\_ like Lennie? How was the situation similar?
  - How was this book or movie different from *Of Mice and Men*? How was this character different than Lennie? How was the situation different?
  - Have I read about situations which are parallel to this before? E-1, O
20. A recent movie which shares both similarities and differences with *Of Mice and Men* is the 2003 film, *Radio*. Survey students to see who might be familiar with this film. Bring all students on board by providing a brief synopsis of the film (See appendix for synopses and other support material. Also see “Resources and Teaching Tips” for a list of possible websites.) E-1

21. Explain to students that this film actually grew out of an article written by Delaware native Gary Smith for the December 16, 1996, issue of Sports Illustrated. This article, entitled “Someone To Lean On,” is Smith’s account of an actual person, James Robert Kennedy. Prepare students for the reading of this article by explaining that although “Radio,” as he came to be known, had many challenges in his life, he was ultimately embraced and loved by an entire community, thanks to a school, its football coach, and its students. W, H, E-1

**During Reading** (“Someone To Lean On/*Radio*):

22. Have students read “Someone To Lean On” to see how it was both similar to and different from *Of Mice and Men*. (Students who are familiar with the movie may also compare and contrast the story with the film version.) Consider having students use a Venn Diagram or other comparison/contrast organizer to record their insights and observations as they read. Students may work with a partner to “pair-read” and complete their organizer. E-2, R, T, O
23. Combine pairs of students to form groups of six to share their insights and observations. As they share with each other, have them add any new thoughts to their organizers. E-2, R, T, O
24. To synthesize students’ perceptions, create a whole-class version of the organizer. For example, recorders from each student group might contribute ideas from their groups by writing on a large Venn Diagram created on bulletin board paper. E-2, T, O

**After Reading** (“Someone To Lean On”/*Radio*):

25. Show segments of *Radio*, the film version of this article, with the purpose of highlighting areas of similarity and difference between Lennie’s and Radio’s stories. Help students begin to come to the understanding that the eras in which these two stories happened had an impact on the outcome of these characters’ situations. Have students explore how our society has changed in its attitude toward and assumption of responsibility for the welfare of people “on the margins,” as Gary Smith describes them.
26. Encourage students to step outside the literary and film treatments of the issue of our responsibility to each other, and consider “What are the challenges and potential effects of being our brother’s keeper?” Refer students back to the list they created previously of areas in which our society has assumed responsibility and areas in which we have not. As they discuss this question, guide them to explore the implications of making decisions with each other in mind.
27. Introduce the second transfer task of the unit by telling students that they are going to imagine themselves in a real-life situation where there is no easy answer, where looking out for each other is challenging, at best. Explain that they will receive a scenario in which they will have to make a decision and

defend that decision based on their own thinking about how best to assume responsibility.

#### WHOSE BEST INTEREST?

Imagine you are a member of a town council. The council is facing a difficult zoning decision. A new prison will be constructed in your town. The town council must select the best location for this prison from among four available sites in the town: next to a nursing home, next to an elementary school, on the marshlands near the town park, or in the neighborhood where you live. As a council member, you will be attending an upcoming meeting, during which each council member must present his recommendation for the site to be selected. Write a speech advocating your choice of site for the prison and supporting your thinking.

**28. Use the Delaware State General Rubric for Writing (in appendix) to guide and evaluate student writing.**

*Code*

*IP = international education perspective*

*IL = information literacy*

*WR = Workplace readiness/21<sup>st</sup> century skills*

*FA = a formative assessment, used to check for understanding*

### Resources and Teaching Tips

*What resources best enrich or support this unit?*

- *Of Mice and Men*, the novel by John Steinbeck
- *Of Mice and Men*, the film versions
  - [www.amazon.com](http://www.amazon.com) (1939 version with Burgess Meredith and Lon Chaney, Jr.)
  - [www.imdb.com](http://www.imdb.com) (1992 version with Gary Sinise and John Malkovich)
- Attached graphic organizers (See appendix)
- Access to a variety of research materials about the 1930's, the living conditions of migrant workers, and the Great Depression
- Video clips and/or photographs of life in America during the 1930's
- Supplies for scrapbooks (optional)
- "It's Okay to be Different" by Angie Erickson (See appendix-Originally published in *Newsweek*, Oct. 24, 1994.)

- “Someone To Lean On” by Gary Smith (*Sports Illustrated*. December 16, 1996, Vol. 85, Issue 25, p.78.) (Can be accessed through an online database at the local public library or a university library.)
- *Radio*, the 2003 film adaptation of Gary Smith’s real-life account of James Robert Kennedy  
([www.sonypictures.com/homevideo/radio/index.htm](http://www.sonypictures.com/homevideo/radio/index.htm))
- Miscellaneous textual materials for use with “Someone To Lean On” and *Radio*
  - [www.scstatehouse.net/sess116\\_200502006bills/4267](http://www.scstatehouse.net/sess116_200502006bills/4267)
  - <http://www.radioandcoachjones.com/>
  - [www.chasingthefrog.com/reelfaces/radio.php](http://www.chasingthefrog.com/reelfaces/radio.php)
  - [www.hollywoodjesus.com/radio\\_about.htm](http://www.hollywoodjesus.com/radio_about.htm)
  - [www.writingstudio.co.za/page480.html](http://www.writingstudio.co.za/page480.html)
  - [www.calendarlive.com:Movie](http://www.calendarlive.com:Movie)
  - [http://movies2.nytimes.com/mem/movies/review.html?title1=Radio%20\(Movie](http://movies2.nytimes.com/mem/movies/review.html?title1=Radio%20(Movie)
  - <http://movies.about.com/cs/radio/a/raddvd012804.htm>
- Other possible texts dealing with the issue of our responsibility for each other:
  - *My Sister’s Keeper* by Jodi Picoult
  - *The Outsiders* by S.E. Hinton
  - *The Car* by Gary Paulsen
  - *Don’t You Dare Read This, Mrs. Dunphrey* by Margaret Peterson Haddix
  - *Ellen Foster* by Kaye Gibbons
  - *The Secret Life of Bees* by Sue Monk Kidd

### Differentiation

- The focus of this unit is characterization, text-to-reader and text-to-text connections. Since the textual material in this unit is very rich, it easy to lose focus.
- Before reading, prepare students and parents for language that may be construed as offensive, when taken out of context.
- Consider reading the first chapter of *Of Mice and Men* as a teacher read-aloud, in order to help students understand the dialect.
- Because some students may have a negative reaction to the harsh language used by the characters in the text in this unit, the teacher may spend some time working on an author’s use of dialogue to establish the characters.
- Key chapters or sections of *Of Mice and Men* could be read aloud with a partner or read as an audio book, to support struggling readers.
- Key chapters of the novel can also be read as Reader’s Theater selections. In order to accommodate this, select several chapters, each one focusing on the dialogue of one particular character, to maintain the focus of the unit.
- Also, for struggling readers, key segments of text may be targeted for student reading while using the film version to provide the story in its entirety.



Appendix

***Brainstorming T-Chart***

***Depression-Era America***  
***1930's***

***Modern America***  
***1960-Present***

## Writing Prompt

**Following Lennie's death, George was arrested and charged with his murder. Imagine that you are either the prosecutor trying to convict George of Lennie's death or the defense attorney trying to acquit him. Write a persuasive speech to the jury in which you give your closing argument in support of a guilty or not guilty verdict. Use insights from the novel to support your arguments.**

## *Of Mice and Men* Character Notes

Name of Character \_\_\_\_\_

Event	Thoughts	Actions	Reactions

Name \_\_\_\_\_

**Three-Column Notes**  
*Use of Language in *Of Mice and Men**

<b>Character</b>	<b>Language</b>	<b>Notes</b>
<b>Lennie</b>		
<b>George</b>		
<b>Curley</b>		
<b>Curley's Wife</b>		
<b>Slim</b>		
<b>Candy</b>		

Write a personal response reacting to George's actions in the final chapter in *Of Mice and Men*. Use the following questions to prompt your thinking:

- a. Were George's actions wrong or right? Why?
  - b. What justification might be offered to support George's actions?
  - c. Were there other solutions that might have been feasible? If so, what are they?
- are they?  
have  
If not, what implications of the era in which the novel took place might  
limited the choices the characters had?

### Holistic Rubric for Personal Response

#### **3** — The personal response-

- reflects a thorough analysis of the author's viewpoint and message in relation to the historical and cultural context of the novel.
- reveals a thoughtful evaluation of the information and message presented in the novel by formulating and expressing an insightful personal response.

#### **2** — The personal response-

- reflects some analysis of the author's viewpoint and message in relation to the historical and cultural context of the novel.
- reveals a general evaluation of the information and message presented in the novel by formulating and expressing a personal response.

#### **1** — The personal response-

- reflects a superficial analysis of the author's viewpoint and message in relation to the historical and cultural context of the novel.
- reveals little evaluation of the information and message presented in the novel and neglects to formulate any adequate personal response.



# Delaware Student Testing Program – Instructional Guide for Writing TBWs

(An Analytic Adaptation of the DSTP General Rubric for Writing)

The following characteristics determine the success of the response in meeting the needs of the audience and fulfilling the writing purpose.

Score of 5	Score of 4	Score of 3	Score of 2	Score of 1	
<p>Score point 5 meets all the criteria listed in score point 4. In addition, a paper receiving this score shows an exceptional awareness of readers' concerns and needs.</p> <p>The student may have shown an exceptional use of:</p> <ul style="list-style-type: none"> <li>Development strategies specific to the purpose for writing</li> </ul>	Organization	Unified with smooth transitions, a clear and logical progression of ideas, and an effective introduction and closing.	Generally unified with some transitions, a clear progression of ideas, and an introduction and closing.	Minimally unified and may lack transitions or an introduction or closing.	Lacks unity.
	Development	Sufficient, specific, and relevant <b>details*</b> that are fully elaborated.	Specific <b>details*</b> but may be insufficient, irrelevant, or not fully elaborated.	Some specific <b>details*</b> but may be insufficient, irrelevant, and/or not elaborated.	No or few specific <b>details*</b> that are minimally elaborated.
<ul style="list-style-type: none"> <li>Distinctive style, voice, tone</li> <li>Literary devices</li> <li>Compositional risks.</li> </ul>	Sentence Form.	Consistently complete sentences with appropriate variety in length and structure.	Generally complete sentences with sufficient variety in length and structure.	Some sentence formation errors and a lack of sentence variety.	Frequent and severe sentence formation errors and/or a lack of sentence variety.
	Style/Word Choice	A consistent style with precise and vivid word choice.	Some style and generally precise word choice.	Sometimes general and repetitive word choice.	Often general, repetitive, and/or confusing word choice.
	Lang. Conventions	Few, if any, errors in standard written English that do not interfere with understanding.	Some errors in standard written English that rarely interfere with understanding.	Several kinds of errors in standard written English that interfere with understanding.	Frequent and severe errors in standard written English that interfere with understanding.

More information, materials, and resources available at <http://www.doe.state.de.us/englangarts/elahome.html>

## It's OK to Be Different

Stop making fun of my disability

BY ANGIE ERICKSON

**W**HY ME? I often ask myself, why did I have to be the one? Why did I get picked to be different? Why are people mean to me and always treating me differently? These are the kinds of questions that I used to ask myself. It took more than 10 years for me to find answers and to realize that I'm not *more* different than anyone else.

I was born on June 29, 1978. Along with me came my twin sister, Stephanie. She was born with no birth defects, but I was born with cerebral palsy. For me, CP made it so I shake a little; when my sister began to walk, I couldn't. The doctors knew it was a minor case of cerebral palsy. But they didn't know if I'd ever walk straight or do things that other kids my age could do.

At first my disability did not bother me, because when you're a toddler, you do things that are really easy. When it took me a little longer to play yard games, because I couldn't run that well, my friends just thought I was slow. My disability was noticed when other children were learning how to write and I couldn't. Kids I thought were my friends started to stay away from me because they said I was different. Classmates began commenting on my speech. They said I talked really weird. Every time someone was mean to me, I would start to cry and I would always blame myself for being different.

People thought I was stupid because it was hard for me to write my own name. So when I was the only one in class to use a typewriter, I began to feel I was different. It got worse when the third graders moved on to fourth grade and I had to stay behind. I got held back because the teachers thought I'd be unable to type fast enough to keep up. Kids told me that was a lie and the reason I got held back was because I was a retard. It really hurt to be teased by those I thought were my friends.

After putting up with everyone making fun of me and me crying about it, I started sticking up for myself when I was 10, in fourth grade. I realized if I wanted them to stop, I would have to be the person who make them stop. I finally found out who my real friends were, and I tried to ignore the ones who were mean. Instead of constantly thinking about the things I couldn't do, I tried to think about the things I *could* do, and it helped others, and myself, understand who I really was. When there was something I couldn't to, such as play Pictionary, I sat and I watched or I would go find something else to do. A few people still called me names and made fun of me, but after a while, when they saw they didn't get a reaction, they quit, because it wasn't fun anymore. When they didn't know was that it did still hurt me. it hurt me a lot more than they could ever imagine.

When I was 12, my family moved. I kept this fairy tale in my head that, at my next school, no one would be mean to me or would see that I had a disability. I'd always wished I could be someone other than myself. I found out the hard way that wasn't going to change, that I'd never be able to write and run with no problems. When kids in my new school found out that I couldn't write and my talking and walking were out of the ordinary, they started making fun of me. They never took time to know me.

Everything went back to the way it was before, I went back to blaming myself and thinking that since I was different, I'd never fit in. I would cry all the time, because it was so hard for me to make friends again. I didn't know whether I should trust anyone—I thought that if people knew that I had a disability they would not like me anymore. It took me a long time to understand that I had to return to not caring about what other people say.

People make fun of others because of insecurity. They have to show off to feel better about themselves. When a person made fun of me everyone thought it was just a big joke. After a while I just started laughing along with them or walking away. I really made some kids mad that they weren't getting any reaction out of me. Yeah, it still hurt a lot. I wanted to break down and start crying right then and there, but I knew I didn't want them to get their pleasure out of my hurt feelings. I couldn't cry.

I still get really frustrated when I can't do certain things, and I probably always will. I thought I should give people a better chance to get to know me, but I knew that I would probably get hurt. I never thought that anyone would want to be friends with somebody who had cerebral palsy. At times I have trouble dealing with kids making fun of me, but these are people who need help finding out things in life and need to be treated better themselves. Maybe then they'll treat others the same. They look disappointed when I walk away or laugh when they try to make fun of me. Perhaps they're hurting more than I am.

It took a lot of willpower on my part and a lot of love from family and friends to get where I am today. I learned that no one was to blame for my disability. I realize that I can do things and I can do them very well. Some things I can't do, like taking my own notes in class or running in a race, but I will have to live with that. At 16, I believe I've learned more than many people will learn in their whole lives. I have worked out that some people are just mean because they're afraid of being nice. They try to prove to themselves and others that they are cool, but,, sooner or later, they're going to wish they hadn't said some of those hurtful things. A lot of people will go through life being mean to those with disabilities because they don't know how to act or what to say to them – they feel awkward with someone who's different.

Parents need to teach their children that it's all right to be different and it's all right to be friends with those who are. Some think that the disabled should be treated like little kids for the rest of their lives. They presume we don't need love and friends, but our needs are the same as every other human being's.

There are times when I wish I hadn't been born with cerebral palsy, but crying about it isn't going to do me any good. I can only live once, so I want to live the best I can. I am glad I learned who I am and what I am capable of doing. I am happy with who I am. Nobody else could be the Angela Marie Erickson who is writing this. I could never be, or every want to be, anyone else.

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ERICKSON, now a sophomore at Wayzata High School in Plymouth, Minn., wrote this essay as a ninth grader at junior high.

## **TRANSFER TASK #1 *IT'S MY LIFE!***

Imagine you are one of the characters in *Of Mice and Men*. Create a scrapbook that depicts your life before, during and after the time portrayed in this novel. This scrapbook should reflect major events, feelings and relationships in your life -- those that were revealed in the book and those that may have happened before or after the events of the book. The end result should provide an image through which those close to you can really come to “know” you as a person. This scrapbook can contain pictures, mementos, journal entries, captions or other appropriate memorabilia. This task will be capstoned by your presentation of the scrapbook to the class, speaking as your character. Your understanding will be assessed by the attached rubric.

### **Rubric for Transfer Task #1- *IT'S MY LIFE***

	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
<b>The Novel</b>	Scrapbook provides a complete, insightful understanding of the novel.	Scrapbook provides a thorough understanding of the novel.	Scrapbook provides partial understanding of the novel.	Scrapbook provides little understanding of the novel.
<b>The Character</b>	The memorabilia as presented shows a perceptive understanding of the character's motivations, actions, values and beliefs.	The memorabilia as presented shows a complete understanding of the character's motivations, actions, values and beliefs.	The memorabilia as presented shows a partial understanding of the character's motivations, actions, values and beliefs.	The memorabilia as presented shows little understanding of the character's motivations, actions, values and beliefs.
<b>The Persona</b>	The presentation shows a perceptive, accurate, believable depiction of the character before, during and after the novel.	The presentation shows an accurate, believable depiction of the character before, during and after the novel.	The presentation shows a partial depiction of the character before, during and after the novel.	The presentation shows limited depiction of the character before, during and after the novel.

## **TRANSFER TASK #2 - *WHOSE BEST INTEREST?***

**Imagine you are a member of a town council. The council is facing a difficult zoning decision. A new prison will be constructed in your town. The town council must select the best location for this prison from among four available sites in the town: next to a nursing home, next to an elementary school, on the marshlands near the town park, or in the neighborhood where you live. As a council member, you will be attending an upcoming meeting, during which each council member must present his recommendation for the site to be selected. Write a speech advocating your choice of site for the prison and supporting your thinking.**

## Delaware Model Unit Gallery Template

This unit has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model unit has undergone a rigorous peer review and jurying process to ensure alignment to selected Delaware Content Standards.

**Unit Title:** **Between a Rock and a Hard Place - *The Crucible***

**Designed by:** **Ann Lewis, Elizabeth Tiffany, Aleta Thompson, Becky Sharp**  
**Modified by Sharon McMahon, Innovative Schools**

**Content Area:** **American Literature**

**Grade Level(s):** **Eleventh Grade**                      **Time Frame:** **3-4 weeks**

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### Summary of Unit

In this secondary ELA unit, students will explore moral issues related to truth and justice, utilizing informational literacy skills to research events in recent history related to “witch hunts” and summarize their findings in both written and oral formats. As a result, they will recognize that “history repeats itself.”

Students will read Arthur Miller’s play *The Crucible*, study the play in terms of both historical and contemporary context, and respond to the issues of truth and justice presented by the play through written, oral, and kinesthetic tasks.

As one final assessment, students will take on the persona of a character in the play and defend in writing that character’s choices and actions. In a second assessment, students will research situations from recent history that reflect similar issues as those presented in *The Crucible* and discuss their findings as a panelist in a symposium format.

### 502 Unit: *The Crucible* Modifications for Newark Charter High School

Arthur Miller’s *The Crucible* is a play whose themes of truth, law, justice, and social action will be highly relevant to the students at Newark Charter High School as they explore the pathways of Global Leadership. This unit is positioned in the American Literature course during the unit linking the Great Depression and the Era of Protest. It is placed here because Arthur Miller wrote the play to comment on the hysteria of McCarthyism. Studying this play will continue to link the themes of truth, law, justice, and social action through history, beginning with the Salem Witch trials, into slavery, emancipation and the Civil War, into *Of Mice and Men*, and beyond the McCarthyism of the 1950’s into the Era of Protest and social action and into the present day.

Since *The Crucible* will be taught in a humanities approach with social studies, instruction will seek to draw connections and parallels between the literature and historical events. At Newark Charter High School, a slightly greater emphasis on McCarthyism will be included, and students will be asked to draw parallels between the play and society during the 1950's, considering how the play, a work of historical fiction, both comments on and reflects the culture of the time and works as a voice of change within that culture. To this end, some additional readings will be included in the curriculum that pull out the issues of McCarthyism and draw parallels to the Salem Witch Trials. In addition, the play, which portrays characters who are part of a tide of fear or who are destroyed by that fear, will be contrasted with the social action studied in the unit which follows *The Crucible* – the Era of Protest, which will cover the Civil Rights Movement and literature from that time period. During the Era of Protest, people used social action and nonviolence to confront unfounded fears and to gain equality. The notion that literature both reflects culture and encourages social change is repeated.

At Newark Charter High School, students will be introduced to Performance Task 1 earlier in the unit. In the DOE unit, students don't learn of the assignment until after reading. At Newark Charter, students will learn of the assignment early in the unit so that they can use a note-taking strategy, such as double-columned notes or sticky-notes, as they read to collect text information on John Proctor or Rev. John Hale. Students will also work with a partner to collect this information, meeting occasionally as the play is read to compare notes, discuss ideas, and share information. These slight revisions will help students actively engage with the reading by allowing the students to read with a set purpose, allowing them to mark important passages as they read, and building their understanding of character motivation.

For Performance Task 2, students will be encouraged to examine issues of evil, ambition, law, and justice on three levels: community, nation, and world. This examination will be done prior to selecting a final topic for the symposium. The intention of adding this additional step is to ensure that students don't automatically generalize the issues presented in *The Crucible* to national or world issues which seem too distant to spur immediate action. Instead, students will be encouraged to look around them and into their community to see how the themes of evil, ambition, truth, law, and justice touch their lives. After exploring all three of these levels, students will select one issue that is meaningful to further research and prepare for the symposium. It is anticipated that this additional step in the process will scaffold the learning for students and produce a symposium that is rich with diversity and issues relevant to the lives of the students at Newark Charter High School.

## Stage 1 – Desired Results

What students will know, do, and understand

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### Common Core State Standards

CC 11-12 RL 1

CC 11-12 RL 2

CC 11-12 RL 3  
CC 11-12 RL 4  
CC 11-12 RL 5  
CC 11-12 RL 8  
CC 11-12 RL 9  
CC 11-12 RL 10  
CC 11-12 W 9a  
CC 11-12 W 9b  
CC 11-12 W 3a

### **Big Idea(s)**

Great literature provides rich and timeless insights into the key themes, dilemmas, and challenges that we face. It presents complex stories in which the inner and outer lives of human beings are revealed.

### **Unit Enduring Understanding(s)**

*Students will understand that...*

1. Truth is not determined by the number of people who believe it. Perception and belief are often assumed to be true, yet truth stands apart from human fallibility.
2. Law and justice are often equated, yet laws are determined by men, while justice is often beyond the scope of law. Law is man's imperfect attempt to interpret and insure justice.
3. Along with responsibility come risk and sacrifice.
4. Historical and cultural context of an author's work influences the author's viewpoint and theme.
5. In an individual's quest to take a stand or be a pioneer, he/she may be met with obstacles out of his/her control, and may not always reach the goals he or she sets for him/herself.
6. Stepping out into any frontier brings potential risks and sacrifices.
7. Good readers make personal connects to the text.
8. Time and place influences text.
9. An effective summary can synthesize ideas from various sources.
10. Writers often use other authors' ideas to stimulate their own thoughts and incorporate these ideas in their writings, avoiding plagiarism.
11. Speakers orally communicate information, opinions, and ideas effectively to different audiences for a variety of purposes.

### **Unit Essential Questions(s)**

Thematic questions

1. What is evil? What forms does it take?
2. When do ambition and the need to protect one's own become destructive?
3. What responsibility does an individual have in combating injustice?
4. What is the difference between law and justice?
5. What is more important, one's life or one's principles, and why?
6. To what extent do we influence each other's behavior and thoughts?
7. What is the cost/risk of tolerating (understanding) and accepting each other's differences?

### Standards-based questions

8. How am I like some or one of the characters in this text?
9. How does the historical and cultural context of this text find its way into the author's message?
10. What do I think about the characters' choices and why?
11. How do the issues and themes presented in the play compare and contrast with those presented in the films?
12. How can I capture the main points of this text?
13. How can I use other authors' ideas to stimulate my own thinking and writing?
14. How can I use other authors' ideas in my own writing without plagiarizing?
15. How can I plan and organize my speaking to best convince my audience?

### Knowledge and Skills

#### *Students will know...*

- that writers convey characters' attitudes and beliefs through character development
- that a summary captures main ideas of a piece of text
- that good readers make personal connections with texts

#### *Students will be able to...*

- analyze a character's motivation, beliefs, etc. and assume a persona, writing consistently as that character
- research events in history, using primary and secondary sources
- plan, organize, and write an abstract that compares/contrasts events in play to history
- use information researched or discussed to form a logical and insightful opinion summarize main ideas presented in a text

## Stage 2 – Assessment Evidence

Evidence that will be collected to determine whether or not Desired Results are achieved

### Suggested Performance/Transfer Task(s)

#### Performance Task #1

##### *A Legacy*

Imagine that you are either John Proctor or Rev. John Hale and that you want to leave behind a written document defending your choices and actions as related in *The Crucible*, by Arthur Miller. Your hope is to leave a legacy for generations to come justifying your actions in the play in the form of a letter, sermon, speech, essay, etc. Your final document should reflect your beliefs (as Proctor or Hale), which guided your actions.

G: to explain/defend Proctor's choice to die rather than renounce his principles or to explain/defend Hale's opposition to Proctor's decision

R: John Proctor or Rev. John Hale

A: the next generation

S: to leave a legacy that truth to your convictions is more important than life or that “life . . . is God’s most precious gift”

P: letter, sermon, essay, speech

S: (rubric) use appropriate textual evidence to support an opinion, Consistency in tone (Proctor or Hale), Framework of exposition--organization (for letter, sermon, letter, speech)

### **Performance Task #2**

#### *The Lessons of Salem*

Can it happen again? What can we do to minimize the likelihood of it happening again?  
 (“The Lessons of Salem.” *Newsweek*, Aug. 31, 1992)

You have been invited to present as a panelist in a symposium. This symposium will explore situations from recent world history in which issues of “prejudice over reason and fear over courage” may have dictated people’s actions/reactions. As one of the panelists, you should select an event and research it, examining the parallels to the Salem Witch Hunt of 1692 that Miller uses as the basis of *The Crucible*. Consider what you have discovered about evil, ambition, law, and justice to suggest what we could learn that might prevent or minimize the likelihood of such a reoccurrence. Present the results of your research with an accompanying abstract to give to symposium participants.

G: to have students explore situations in recent history where “prejudice over reason and fear over courage” prevail.

R: researchers

A: listening/viewing public (the classroom)

S: symposium with expert panel members, result of research—goal of symposium is to prevent this sort of thing from happening in the future

(symposium includes a panel presentation and a forum—Q and A with audience)

P: panel presentation with written abstracts of individual presentations

S: panel participation and abstract evaluation (see rubric)

**Performance Task 1: Adaptation of DSTP General Rubric for Writing**  
**(Note: addition from General Reading Rubric added to “development”)**

The following characteristics determine the success of the response in meeting the needs of the audience and fulfilling the writing purpose.

Score of 5	Score of 4	Score of 3	Score of 2	Score of 1
<p>Score point 5 meets all the criteria listed in score point 4. In addition, a paper receiving this score shows an exceptional awareness of readers' concerns and needs.</p> <p>The student may have shown an exceptional use of:</p> <ul style="list-style-type: none"> <li>• Development strategies specific to the purpose for writing</li> <li>• Distinctive style, voice, tone</li> <li>• Literary devices</li> <li>• Compositional risks</li> </ul>	<p>Unified with smooth transitions, a clear and logical progression of ideas, and an effective introduction and closing.</p> <p>Sufficient, specific, and relevant details that are fully elaborated. A thorough understanding and interpretation of the generalizations, concepts, and facts specific to the task or question, providing new insights into some aspect of this information.</p> <p>Consistently complete sentences with appropriate variety in length and structure.</p> <p>A consistent style with precise and vivid word choice that reflects character.</p> <p>Few, if any, errors in standard written English that do not interfere with understanding.</p>	<p>Generally unified with some transitions, a clear progression of ideas, and an introduction and closing.</p> <p>Specific details but may be insufficient, irrelevant, or not fully elaborated. A reasonably accurate understanding of the generalizations, concepts, and facts specific to the task or situation.</p> <p>Generally complete sentences with sufficient variety in length and structure.</p> <p>Some style and generally precise word choice that reflect character.</p> <p>Some errors in standard written English that rarely interfere with understanding.</p>	<p>Minimally unified and may lack transitions or an introduction or closing.</p> <p>Some specific details but may be insufficient, irrelevant, and/or not elaborated. An incomplete, limited, and/or sketchy understanding and interpretation of the text; responses may be fragmented or unfocused</p> <p>Some sentence formation errors and a lack of sentence variety.</p> <p>Sometimes general and repetitive word choice.</p> <p>Several kinds of errors in standard written English that interfere with understanding.</p>	<p>Lacks unity.</p> <p>No or few specific details that are minimally elaborated. Serious misconceptions about the generalizations, concepts, specific to the text.</p> <p>Frequent and severe sentence formation errors and/or a lack of sentence variety.</p> <p>Often general, repetitive, and/or confusing word choice.</p> <p>Frequent and severe errors in standard written English that interfere with understanding.</p>

**For non-scorable responses see below:**

- Blank
- Off topic
- Written in a language other than English
- Refusal
- Illegible
- Insufficient

**Performance Task 2: An adaptation of Delaware General Reading Rubric**

(Note: last two bullets under “Going Beyond the Text” dropped)

	Score of 5	Score of 4	Score of 3	Score of 2	Score of 1
<b>Going Beyond the Text (Process)</b>	<ul style="list-style-type: none"> <li>• Demonstrates a thorough understanding and interpretation of the generalizations, concepts, and facts specific to the task or question and may provide new insights into some aspect of this information.</li> <li>• Exhibits insightful extension of the text by making a variety of strong connections to other texts, experiences, and/or concepts.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates a reasonably accurate understanding of the generalizations, concepts, and facts specific to the task or situation.</li> <li>• Exhibits superficial extensions of the text by making literal connections to other texts and/or experiences.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates an incomplete, limited, and/or sketchy understanding and interpretation of the text; responses may be fragmented or unfocused.</li> <li>• Exhibits attempted extensions of the text by making unfocused references to other texts and/or experiences.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates serious misconceptions about the generalizations, concepts, specific to the text.</li> <li>• Exhibits no real extension of the text; responses are disjointed and incomplete or irrelevant and/or inappropriate.</li> </ul>	<ul style="list-style-type: none"> <li>• Inappropriate and irrelevant response or blank response.</li> </ul>
<b>Focusing on the Text (Content)</b>	<ul style="list-style-type: none"> <li>• Cites ample text-based facts with complete accuracy.</li> <li>• Includes extensive pertinent information from the text to support understanding.</li> <li>• Retells or paraphrases texts to illustrate central ideas.</li> </ul>	<ul style="list-style-type: none"> <li>• Cites some text-based facts with relative accuracy.</li> <li>• Includes some pertinent information from the text to support understanding.</li> <li>• Retells or paraphrases texts without explicitly illustrating central details.</li> </ul>	<ul style="list-style-type: none"> <li>• Cites research text-based facts with minimal accuracy.</li> <li>• Includes details from the text that do not support understanding.</li> <li>• Retells parts of texts without showing understanding of central ideas.</li> </ul>	<ul style="list-style-type: none"> <li>• Cites text-based facts inaccurately or cites no text-based facts.</li> <li>• Includes isolated bits of information from the text that do not support understanding.</li> <li>• Copies part of the texts without showing an understanding of central ideas.</li> </ul>	

**Note: In using the reading rubric, note that “text” and “texts” refer to research texts used to prepare for oral presentation and abstract.**

**Other Evidence** (This could include tests, quizzes, prompts, student work samples, and observations used to collect diverse evidence of student understanding.)

1. Vocabulary quizzes, reading quizzes that focus on ideas presented in the Enduring Understandings and Essential Questions
2. Formative assessments on characterization and summary
3. Reading reflections entries during reading. In stage 3, the sample reading responses could be adapted as informal reader responses/journal entries or be assigned as more formal essay topics or prompt assignments.

**Student Self-Assessment and Reflection** (This should include opportunities for students to monitor their own learning. Ex: reflection journals, learning logs, pre- and post-tests, editing own work.)

## Stage 3 – Learning Plan

(Design learning activities to align with Stage 1 and Stage 2 expectations)

Learning Activities: What learning experiences and instruction will enable students to achieve the desired results?  
How will the design

W = Help the students know Where the unit is going and What is expected? Help the teachers know Where the students are coming from (prior knowledge, interests)

H = Hook all students and Hold their interest?

E = Equip students, help them Experience the key ideas and Explore the issues?

R = Provide opportunities to Rethink and Revise their understandings and work?

E = Allow students to Evaluate their work and its implications?

To = Be Tailored (personalized) to the different needs, interests, and abilities of learners?

O = Be Organized to maximize initial and sustained engagement as well as effective learning?

1. Hook students with improvisational activities.
  - Relate improvisational scenes to themes present in *The Crucible* (for example, some situations where people react with “crowd” mentality, situations of extreme peer pressure, etc.). **H, E**
  - Create good guy/bad guy situation that shows that tolerance can be a step to understanding and accepting differences. Ask students to create a situation and two characters—a good guy and a bad guy. Run improv first where the “bad guy” shows no tolerance; Run situation a second time where tolerance is shown. (for example, a new kid comes to school and is not part of the “accepted” cliques. A second student belittles this new kid. Take 2: The second student decides to befriend him
2. Introduce essential questions/enduring understandings and key vocabulary and literary terms. **W, E**
  1. What is evil? What forms does it take?
    - a. In whom or where does the evil reside in *The Crucible*?
  2. When do ambition and the need to protect one’s own become destructive?
    - a. Is Proctor’s view of his responsibility to his family right?
  3. What responsibility does an individual have in combating injustice?

- a. Does Hale share any guilt in the final scenes of the play?
4. What is the difference between law and justice?
5. What is more important, one's life or one's principles, and why?
  - a. Who is right—Proctor or Hale?
  - b. How does (or can) Elizabeth justify her compliance?
6. To what extent do we influence each other's behavior and thoughts?
7. What is the cost/risk of tolerating (understanding) and accepting each other's differences?
8. Why do learned men like Danforth, Parris, and Hale accept the girls' accusations?
9. Is there anything that could have been done to protect their society from the mass hysteria? Are there signs they should have seen? Are there signs we need to watch out for today, in our world?
10. Why does Hale "quit this court"?
11. Is there any future checks the Salem community could use? That we could use?
12. Besides the obvious sacrifice that Proctor makes, what sacrifices do you think Hale has or will have to make?
13. Do you consider Elizabeth's sacrifice of lesser importance than her husband's? Why or why not?
14. How do the events of the 1950's influence Miller's choice of subject and theme?
15. What message do you think Miller intended to convey through *The Crucible*?
16. How can some of the characters in the play be seen as pioneers (i.e. Elizabeth, Proctor, Hale)?
3. While not appropriate to read the entire play out loud in class, as students work their ways through the play, they might read critical scenes from the play aloud in class or in small groups to increase understanding (teacher should "think aloud" to both check and increase student comprehension). This would also help prepare novice speakers for the Performance Task 2. **R, T**
4. Divide students into groups and assign each group a short but important scene from the play. The students will also view film versions of their assigned scene to compare subtle but relevant similarities and/or differences in ideas, viewpoints, or characters. Have small groups of students perform key, short scenes from the play. This would help prepare novice speakers for the Performance Task 2. **E, R, T**
5. View a movie version of *The Crucible* (Daniel Day Lewis, Wynona Ryder) and compare treatment of a specific scene, discuss the decision to leave in the scene between Abigail and Proctor in the woods that Miller deleted from many of his stage productions, etc. **E, R**
6. Reading responses **E, R, T (E2)**:
  - Write alternate scenes not included in the play itself (this could be conversations between Betty and Abigail before the play opens, meetings between the girls once the trial begins, etc)

- Write a correspondence between Elizabeth and John while Elizabeth is in jail, reflecting their individual personalities in their letters.
  - What does Parris learn? Write a letter or his final sermon after the “witch hunts” are finished, etc.
  - Does Abigail ever learn? Look 20 years into the future, after Proctor’s death, and write about Abigail’s journey through life.
  - What happens to Elizabeth? How does she help her young children grow up proud of their father?
  - To what extent are jealousy, greed, and ambition like natural disasters or supernatural evils? To what extent are they different? Relate this to *The Crucible*.
7. What is the significance of the title? How do the different definitions of the word *crucible* relate to themes Miller presents in the play? Organize ideas using an appropriate graphic or visual organizer. **E, R,**
  8. To synthesize the concepts of motivation and reasons for characters’ decisions, assign Performance Task #1. Provide students with handouts of the task and the rubric. You will need to spend some time explaining the symposium format to the students. When the assignment has been completed, use the rubrics to provide feedback to the students.
  9. Read and discuss *Newsweek* article “The Lessons of Salem,” *Newsweek*, Aug 31, 1992 in preparation for Performance Task 2. **E, R**
  10. As students prepare the written portions of both performance tasks, they should use the writing process, including self and peer evaluation. **R, E2**
  11. View scenes from other films related to McCarthy’s Red Scare **E, R:**
    - Watch the movie about the McCarthy trials (*Guilty by Suspicion*) and discuss its value to today’s society, to *The Crucible*, etc.
    - View the clips of the trial scenes from *The Way We Were* and do the same thing.

To synthesize the concepts in this unit, introduce the Performance Task #2. Provide students with handouts of the task and the rubric. You will need to spend some time explaining the symposium format to the students. When the assignment has been completed, use the rubrics to provide feedback to the students.

### Resources and Teaching Tips

*The Crucible*, by Arthur Miller

“The Lessons of Salem” (*Newsweek*, Aug. 31, 1992)

Films:

- *Guilty by Suspicion*
- *The Crucible*
- *The Way We Were*

Abstract format and summarizing skills may need to be reviewed and modeled.

Informational literacy skills (research, plagiarism, note-taking, website evaluation, etc) will need to be reviewed.

Format and guidelines for symposium presentation and Q and A with class audience may need to be discussed and modeled.

If reading responses are used as prompt or essay assignments, formats/guidelines/rubrics will need to be presented.

Some students misunderstandings and misconceptions:

- Proctor's decision—what is the big deal about his principles?

Why does Elizabeth acquiesce? Why doesn't she protest more vehemently?

### **Differentiation**

Play may be read aloud, students taking parts, teacher thinking aloud to explain or interpret events, actions, speeches, etc.

Key scenes from the film *The Crucible* could be viewed after reading the scenes to enhance understanding.

# Using Technology to Explore Geometric Transformations

## Delaware Recommended Curriculum Mathematics Unit Cover Page

*Preface: This unit has been created as a model for teachers in their designing or redesigning of course curricula. It is by no means intended to be inclusive; rather it is meant to be a springboard for teacher thought and creativity. The information we have included represents one possibility for developing a unit based on the Delaware content standards and the Understanding by Design framework and philosophy.*

**Unit Title:** Using Technology to Explore Geometric Transformations  
(GeoMaster, Cabri Jr., Geometer's Sketchpad, etc.)

**Grade Level(s):** 10

**Subject/Topic Area:** Geometry Reasoning

**Searchable Key Words:** Similar, congruent, inductive reasoning, conjectures, deductive reasoning, transformations, technology, GeoMaster, Cabri, Sketchpad

**Designed By:** Pamela Mason, Leslie Williams  
Delmar High School

**Time Frame:** 12 to 15 hours

**Reviewed by:**

**Date:** Spring 2006

**SUMMARY OF PURPOSE:** In this 10<sup>th</sup> grade Geometry unit, students will learn about Geometric Transformations and how they are used in today's workplace. They will be able to not only write mathematical descriptions of transformations but also perform these transformations by hand and on available technology. Students will use their inductive and deductive reasoning skills to explore the ideas of congruence and similarity. As a final project, students will create a design for one of three products.

### Charter School Unit Modification

#### Guiding Questions

1. Why was this model unit of instruction selected as part of your schools' curricular submission?

This unit is posted on the DDOE web site as an exemplary unit of instruction for math. It teaches fundamental information and strategies for geometric reasoning.

2. What modifications have been made to the model unit of instruction to meet the specific needs of the student population your school serves?

No modifications will need to be made based on the student population.

3. What modifications have been made to the model unit of instruction that reflect the resources (human, time, building, technology etc.) available to your school?

No modifications will need to be made based on the resources available. The high school will have classrooms for students.

4. Describe any other modifications that have been made to the model unit of instruction that will assist in the curricular review for your school.

No other modification will need to be made to the unit.

# Using Technology to Explore Geometric Transformations

## Stage 1: Desired Results

### DE Standards Measured by the Transfer Task

Primary: Geometric Reasoning (Standard 3)

- Justify whether two figures are similar or congruent.
- Use inductive reasoning to make conjectures and deductive reasoning to justify conclusions.
- Determine the results of transformations.
- Use appropriate technologies to explore multiple transformations.

Secondary: Problem-Solving (Standard 5)

- Build new mathematical knowledge.
- Apply a variety of appropriate strategies to solve problems.

Reasoning and Proof (Standard 6)

- Make and investigate mathematical conjectures.

- Develop mathematical arguments.

Communication (Standard 7)

- Organize and consolidate mathematical thinking through communication.
- Communicate mathematical thinking clearly and coherently.
- Use language of mathematics to express mathematical ideas precisely.

### Big Idea

Objects in space can be oriented in an infinite number of ways.

### Enduring Understandings

*Students will understand that...*

- An object's location in space can be described quantitatively.
- There are multiple ways to transform an object.

### Essential Questions

- How are objects transformed mathematically?
- Why are objects transformed mathematically?
- How can motion be described mathematically?

### Unit Question(s)

- How can we use our knowledge of transformations to describe them mathematically?
- Which transformations are commutative?

### Targeted Knowledge & Skill

*Students will know...*

- the differences between reflections, translations, rotations, and dilations.
- which transformations create similar and/or congruent figures.

*Students will be able to...* (21<sup>st</sup> century skills)

- describe various transformations a shape has undergone.
- develop their own designs and describe them using geometric transformations.
- graph composite transformations on the Cartesian plane.

# Using Technology to Explore Geometric Transformations

## Stage 2: Assessment Evidence

### Transfer Task

#### Performance Task

You are working for Dynamic Designs, Inc. The following accounts have requested new artwork. *Sonic Skateboard Co.* needs a new design for their deck, *Pineapple Computer* needs a new screensaver, and *Jet Tees* is developing a new line of graphic t-shirts. Since you are the senior designer, you may choose which design to develop.

Each company requires a repetitive design. You have chosen to use composite transformations (of at least two types). The company requires a precise mathematical description in order to program the design into their manufacturing software. Please include a complete professional drawing on a Cartesian plane with the location of the pre-image clearly marked. If you choose to use graphing technology, be sure to format the diagram with axes on. Your boss is offering you a bonus if you create a model product for the client.

#### Rubrics for Transfer Tasks

##### Performance Task

	4	3	2	1
Diagram	Graphs composite transformations of at least two types precisely on a Cartesian plane	Graphs composite transformations of at least two types on a Cartesian plane	Graphs composite transformations on a Cartesian plane	Attempts to graph composite transformations
Instructions	Clearly, coherently provides step-by-step instructions using sophisticated mathematical language	Provides step-by-step instructions using mathematical language	Provides step-by-step instructions	Instructions contain errors in basic understanding

#### Other Evidence (e.g., tests, quizzes, prompts, work samples, observations)

All copies can be found in Appendix A.

##### Sketch and Describe Quizzes

- Quiz A
- Quiz B
- Quiz C

##### Transformations Test

# Using Technology to Explore Geometric Transformations

## Student Self-Assessment and Reflection

### Pairs Communication Activity

Directions: Partners each create a pre-image and an image using a single transformation of their choice without showing their partner. Next each student will write directions for creating their pre-image and then transforming it. First student A will read their directions to student B while the student B sketches as instructed. Once complete they will compare sketches and discuss how to make the directions more clear if necessary. Then they will switch jobs with student B reading and student A sketching. Students should be given multiple opportunities including different partners to repeat the process to build confidence and precision. At the conclusion of this activity the following reflection may be used.

### Reflection:

1. On which part of this activity were you most successful and why (giving or receiving directions)?
2. Which part was most difficult and why?
3. What types of strategies did you develop with your partner to write directions more clearly?

# Using Technology to Explore Geometric Transformations

## Stage 3: Learning Plan

### Key learning events needed to achieve unit goals

Learning Activities: What learning experiences and instruction will enable students to achieve the desired results?

- **Calculator exploration of transformations using GeoMaster.**
- **Graphing transformations (single and composite) by hand on a Cartesian plane.**
- **Pairs Communication Activity.**

**Group exploration using TI Navigator and Interwrite board.**

### Lesson 1

*General Topics* Introduction of formal mathematical terminology that will be used throughout the unit.

*Transformation, translation, reflection, rotation, rigid, composition of transformations, line of reflection, point of rotation, horizontal and vertical shifts, dilation, scale factor*

1. Use PowerPoint presentation (see sample PowerPoint in Appendix B) of people and places where knowledge of geometric transformations are applied to generate interest and discussion about transformations. Discuss with students the benefits of this unit.  
**W, H**
2. Brainstorm as a class current knowledge about geometric transformations and formalize the correct mathematical terminology. Students will be given a Vocabulary Template (see Appendix) to organize transformation terminology. Complete template on Interwrite Board with students and print for any special needs students.  
**E1, O, T**

### Lesson 2

*General Topics* Reflection

1. Begin having students reflect basic polygons with paper and pencil. Make conjectures about what it's going to look like. **E1**
2. Ask students to discuss the ideas of congruence and similarity. Are all images created by reflections congruent? Are all images created by reflections similar? How could various mathematical principles be used to prove that all reflections congruent? (distance formula, slope formula, SSS, SAS, ASA, etc.) **E1, R**
3. Provide a homework problem in which student will justify congruence of a reflected triangle. **E1**
4. Use direct instruction to show students how to reflect geometric shapes using a TI calculator with GeoMaster and Cabri Jr. (or using a computer with Geometer's Sketchpad software). **E1**
5. Allow students time to reflect polygons using any line, not just vertical and horizontal lines. Various student designs should be projected via TI Navigator (or computer projector) in order to encourage further exploration and generate possible conjectures for multiple reflections. **E1, T, R**
6. Informally assess student work via the TI Navigator and assist and encourage exploration as needed. **E1, E2**

### Lesson 3

# Using Technology to Explore Geometric Transformations

## *General Topics Rotations*

1. As a warm-up begin class by polling students using the TI Navigator to informally assess reflection knowledge. **E2**
2. Using TI Navigator send students FLAGTURN program (see Appendix). Discuss what is occurring in the program. Allow students time to change the geometric shape being rotated by changing the coordinates in matrix B. **E1**
3. Use direct instruction to show students how to rotate geometric shapes using GeoMaster, Cabri Jr. or Geometer's Sketchpad, emphasizing the need to specify a center point and an angle of rotation. **E1**
4. Allow students time to rotate polygons using appropriate technology and explore the effects of rotations around various points with various angles of rotation. **E1**
5. Again discuss with students the ideas of similarity and congruence. When geometric shapes are rotated, is the image similar or congruent to the pre-image? How can this be proved using previous knowledge? **E1, R**
6. Provide a homework problem in which student will justify congruence of a rotated triangle. **E1**
7. Distribute graph paper, rulers, and protractors and discuss how to rotate by hand. Provide various examples of rotating segments and triangles 90 degrees, 180 degrees, 270 degrees, and 360 degrees. **E1**
8. Students should complete Quiz A (see Appendix).

## **Lesson 4**

### *General Topics Translations*

1. As a warm-up display the visual (see Appendix) and ask students to describe the transformations using correct mathematical terminology. **E2**
2. Discuss how to describe translations mathematically with the students. Again discuss with students the ideas of similarity and congruence. When geometric shapes are translated, is the image similar or congruent to the pre-image? How can this be proved using previous knowledge? **E1, R**
3. Provide examples and practice problems of translating triangles. **E1**
4. Have students complete the Rigid Transformation Organizer (see Appendix) individually. Discuss results as a class using the Interwrite Board. Print for special needs students. **T, O**
5. Students complete the Pairs Communication Activity (see Stage 2: Student Self-Assessment and Reflection). **E2**
6. Provide a homework problem in which student will justify congruence of a translated parallelogram. **E1**
7. Students should complete Quiz B (see Appendix).

## **Lesson 5**

### *General Topics Dilations*

1. Discuss the need for dilations with scale drawings in construction, photo enlargement, camera operations, zoom feature on calculator, nesting cups, etc. **W**
2. Allow students time to dilate polygons using appropriate technology and explore the

# Using Technology to Explore Geometric Transformations

effects of various scale factors. **E1**

3. Again discuss with students the ideas of similarity and congruence. When geometric shapes are dilated, is the image similar or congruent to the pre-image? How can this be proved using previous knowledge? (AA, SAS, SSS) **E1, R**
4. Provide a homework problem in which student will justify similarity of a dilated triangle. **E1**
5. Students should complete Quiz C (see Appendix).

## Lesson 6

### *General Topics* Review and Assess

1. Students will complete the Pairs Communication Activity using different student groupings than in Lesson 4. (see Stage 2: Student Self-Assessment and Reflection). **E2**
2. Students should complete the Unit Test (see Appendix).
3. Students will work with a partner to correct any errors and misunderstandings from the Unit Test. Students will write two paragraphs each addressing each category from the Unit Test Reflection Checklist (see Appendix). One paragraph will highlight their strengths on the test. In the second paragraph students will explain any misunderstandings from the test including test corrections. **R, E2, O**
4. Students should complete the Performance Assessment.

The acronym WHERETO summarizes key elements to consider when designing an effective and engaging learning plan.

W – Help the students know Where the unit is going and What is expected? Help the teachers know Where the students are coming from (prior knowledge, interests)

H – Hook all students and Hold their interest?

E – Equip students, help them Experience the key ideas and Explore the issues?

R – Provide opportunities to Rethink and Revise their understandings and work?

E – Allow students to Evaluate their work and its implications?

T – Be Tailored (personalized) to the different needs, interests, and abilities of learners?

O – Be Organized to maximize initial and sustained engagement as well as effective learning?

### *Code*

*IP = international education perspective*

*IL = information literacy*

*WR = Workplace readiness/21<sup>st</sup> century skills*

*FA = a formative assessment, used to check for understanding*

## Resources & Teaching Tips

- What resources best enrich or support this unit?

### Internet

<http://www.shodor.org/interactivate/activities/transform/index.html>

This site can be used by students and teachers to transform geometric rigid shapes on the coordinate plane.

[http://education.ti.com/educationportal/sites/US/productDetail/us\\_ti\\_navigator.html](http://education.ti.com/educationportal/sites/US/productDetail/us_ti_navigator.html)

This part of the Texas Instruments website for educators discusses the TI Navigator.

## Using Technology to Explore Geometric Transformations

[http://education.ti.com/educationportal/activityexchange/activity\\_list.do?cid=us](http://education.ti.com/educationportal/activityexchange/activity_list.do?cid=us)

This part of the Texas Instruments website for educators includes classroom activities using their technology.

<http://www.calcomp.com/interwriteschoolpad.htm>

This site shows how to use the Interwrite SchoolPad in the classroom, complete with video and ordering details.

[http://education.ti.com/educationportal/sites/US/productDetail/us\\_geomaster\\_83\\_84.html](http://education.ti.com/educationportal/sites/US/productDetail/us_geomaster_83_84.html)

This site is where GeoMaster may be downloaded for free, complete with users guide.

### Media

PowerPoint

### Print

Coxford, Arthur F., Fey, James T., Hirsch, Christian R., Schoen, Harold L., Burrill, Gail, Hart, Eric W., & Watkins, Ann E. (1997). *Contemporary Mathematics in Context Course II*. Chicago, IL: Everyday Learning.

- **What tips to teachers of the unit can you offer about likely rough spots/students misunderstandings and performance weaknesses, and how to troubleshoot those issues?**

### Accommodation/Differentiation ideas and tips

The time period needed to complete this unit will vary depending upon student achievement levels and class grouping.

**Appendix A**  
**Sample Resources**

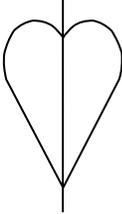
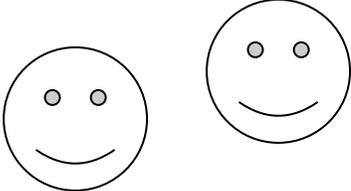
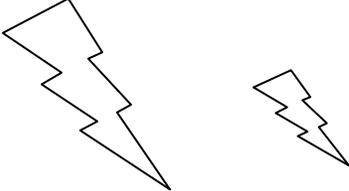
# Using Technology to Explore Geometric Transformations

## Vocabulary Template

Transformation	Related Terms	Sketch

# Using Technology to Explore Geometric Transformations

## Example of Completed Vocabulary Template

<b>Transformation</b>	<b>Related Terms</b>	<b>Sketch</b>
<b>Reflection (flip across a line)</b>	Line of reflection Pre-image and image Rigid	
<b>Rotation (turn about a point in a specific direction)</b>	Point of rotation Degrees Clockwise or counterclockwise Rigid	
<b>Translation (shifted copy)</b>	Vertical and horizontal shift Rigid	
<b>Dilation (reduction or enlargement)</b>	Scale factor Not rigid	

# Using Technology to Explore Geometric Transformations

## Flagturn Program

```
ClrDraw
For(N,1,8,1)
[A]*[B]→[B]
Line([B](1,1),[B](2,1),[B](1,2),[B](2,2))
Line([B](1,2),[B](2,2),[B](1,3),[B](2,3))
Line([B](1,3),[B](2,3),[B](1,4),[B](2,4))
For(K,1,25,1)
End
ClrDraw
End
Stop
```

Pre-load matrices A and B as follows:

$$A = \begin{bmatrix} 0.707 & -0.707 \\ 0.707 & 0.707 \end{bmatrix} \quad B = \begin{bmatrix} 0 & 0 & 3 & 0 \\ 0 & 8 & 6 & 4 \end{bmatrix}$$

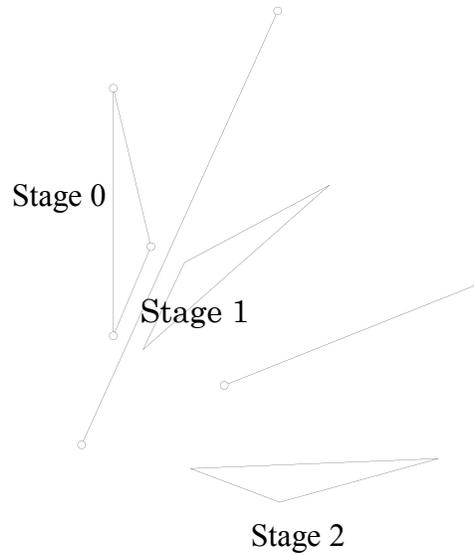
Reproduced from:

Coxford, Arthur F., Fey, James T., Hirsch, Christian R., Schoen, Harold L., Burrill, Gail, Hart, Eric W., & Watkins, Ann E. (1997). *Contemporary Mathematics in Context Course II*. Chicago, IL: Everyday Learning. (Page 153)

# Using Technology to Explore Geometric Transformations

## Quiz A

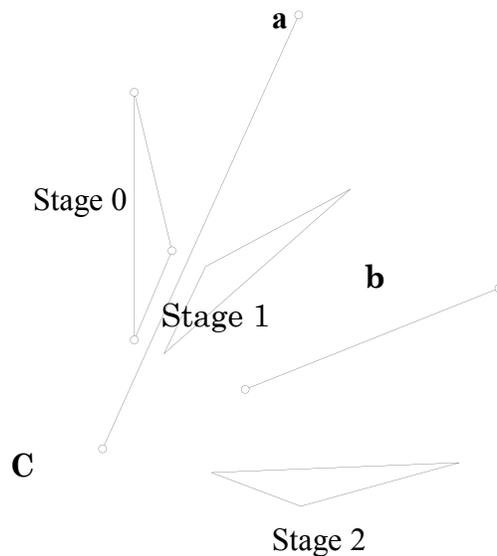
Use the following diagram to answer the questions below. You may use a protractor and ruler as needed.



1. Describe the transformation from the pre-image at stage 0 to the image at stage 1.
1. Describe the transformation from the image at stage 1 to the image at stage 2.
2. Describe in a single transformation how the pre-image can be formed into the image at stage 2.

# Using Technology to Explore Geometric Transformations

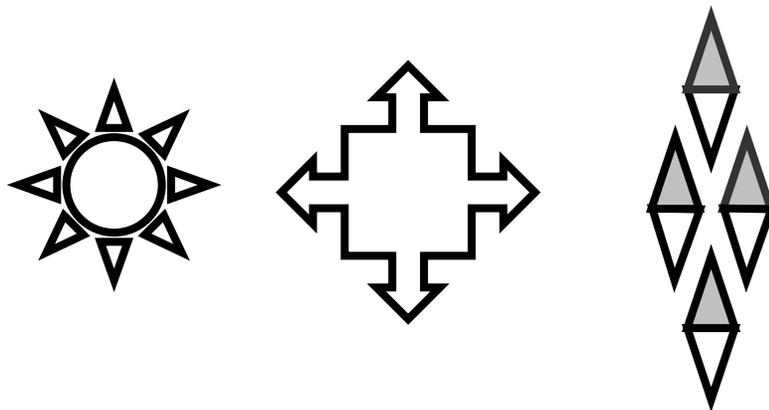
## Key to Quiz A



1. reflection across line a (see above)
2. reflection across line b (see above)
3. 80 – 90 degree clockwise rotation about point C (see above)

# Using Technology to Explore Geometric Transformations

## Lesson 4 Warm-Up Visual



# Using Technology to Explore Geometric Transformations

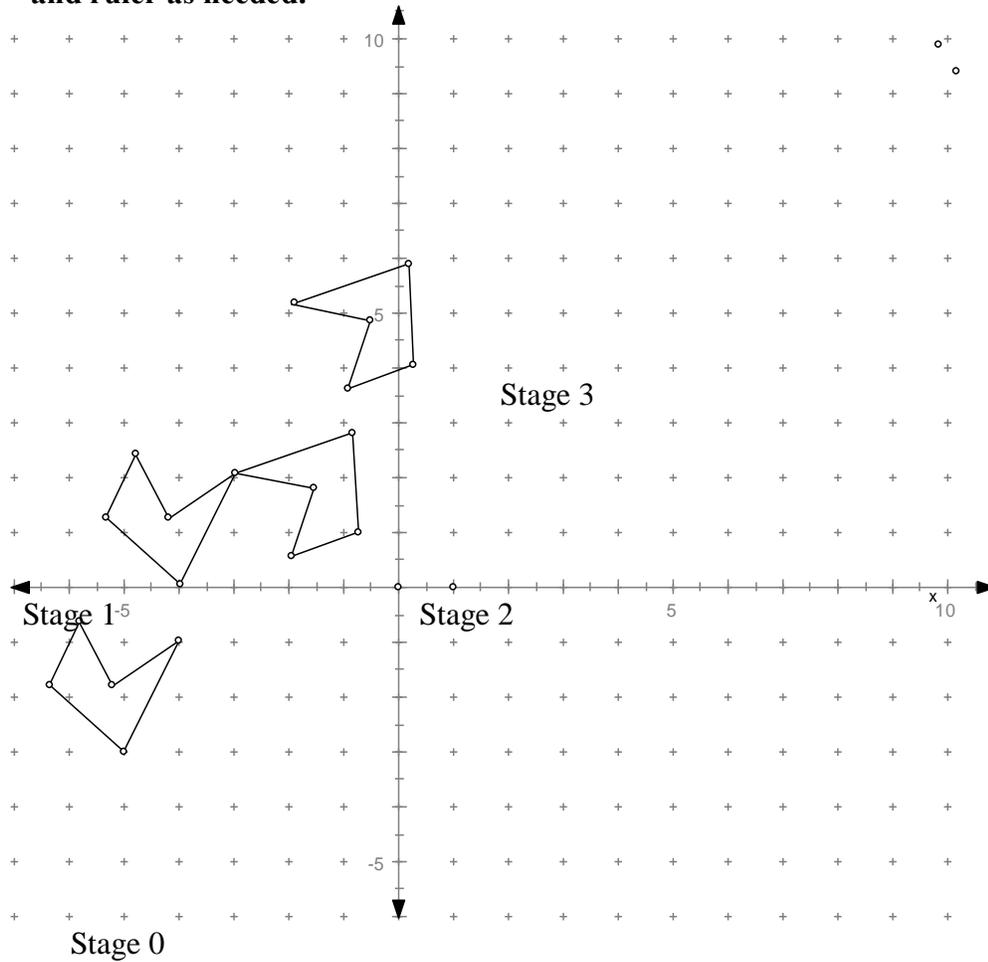
## Rigid Transformation Organizer

<b>Reflections</b>	
x-axis	$(x, y) \rightarrow ( \quad , \quad )$
y-axis	$(x, y) \rightarrow ( \quad , \quad )$
$y = x$	$(x, y) \rightarrow ( \quad , \quad )$
$y = -x$	$(x, y) \rightarrow ( \quad , \quad )$
<b>Rotations</b>	
<b>Counterclockwise</b>	
90° about the origin	$(x, y) \rightarrow ( \quad , \quad )$
180° about the origin	$(x, y) \rightarrow ( \quad , \quad )$
270° about the origin	$(x, y) \rightarrow ( \quad , \quad )$
<b>Translations</b>	
horizontal translation: h vertical translation: k	$(x, y) \rightarrow ( \quad , \quad )$

# Using Technology to Explore Geometric Transformations

## Quiz B

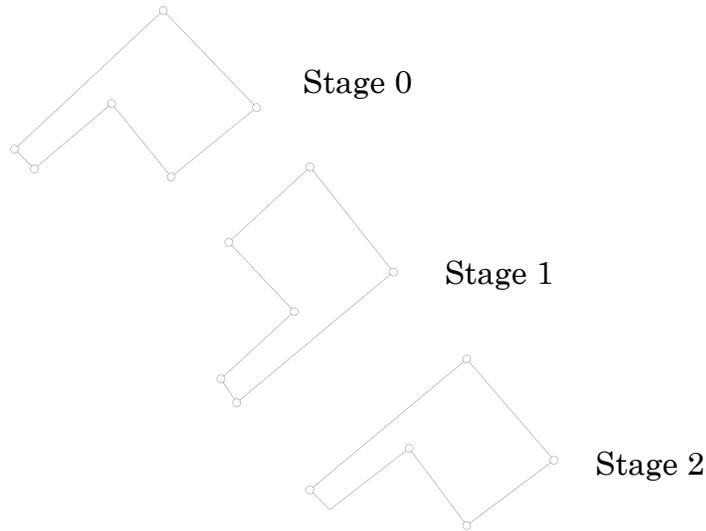
Use the following diagram to answer the questions below. You may use a protractor and ruler as needed.



1. Describe the transformation from the pre-image at stage 0 to the image at stage 1.
  
2. Describe the transformation from the image at stage 1 to the image at stage 2.
  
3. Sketch stage 4 and stage 5 on the Cartesian plane above.

# Using Technology to Explore Geometric Transformations

Use the following diagram to answer the questions below.

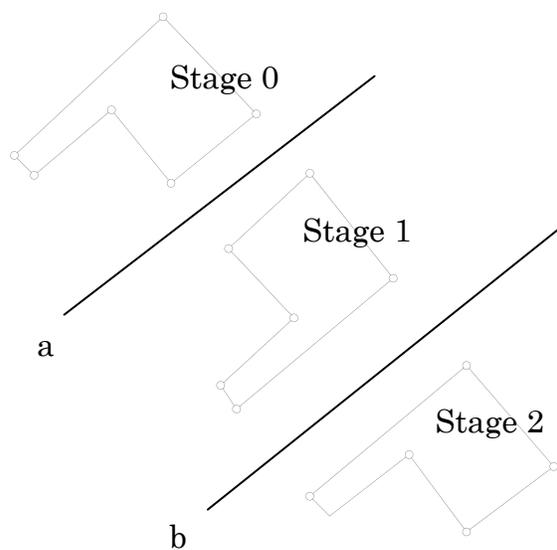
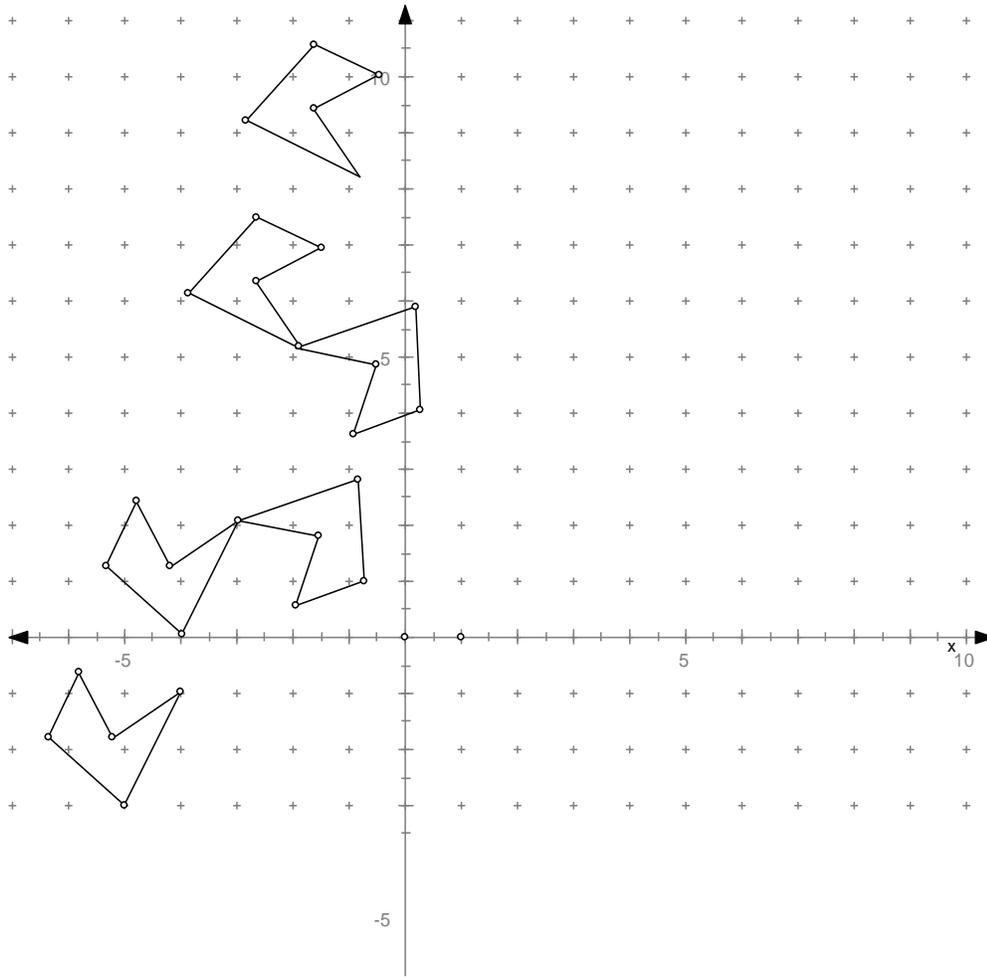


4. Describe the transformation from the pre-image at stage 0 to the image at stage 1.
5. Describe the transformation from the image at stage 1 to the image at stage 2.
6. Describe in a single transformation how the pre-image can be formed into the image at stage 2.

# Using Technology to Explore Geometric Transformations

## Key to Quiz B

1. translation  $(x+1, y+3)$  or equivalent expression
2. rotation of  $135^\circ$  counterclockwise about  $(-3,2)$

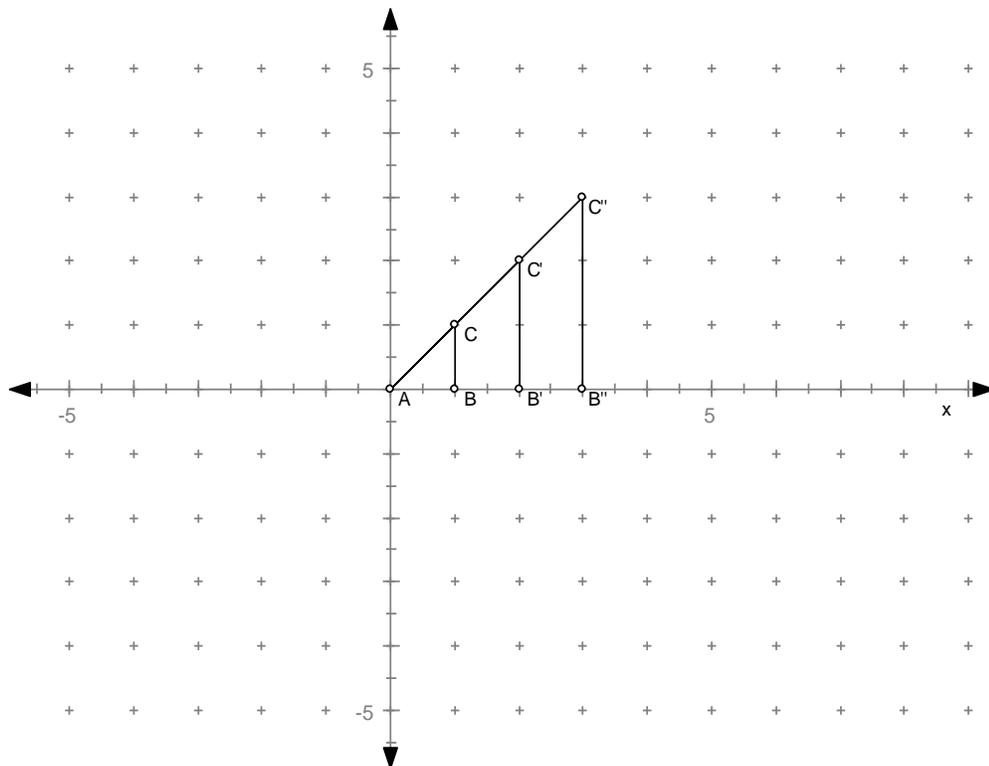


1. reflection across line a, (see above)
2. reflection across line b, (see above)
3. translation down and to the right, twice the distance between lines a and b

# Using Technology to Explore Geometric Transformations

## Quiz C

Use the following diagram to answer the questions below. You may use a protractor and ruler as needed.



1. Describe the transformation from the pre-image  $\triangle ABC$  to image  $\triangle A'B'C'$ .
2. Describe the transformation from the image  $\triangle A'B'C'$  to the image at  $\triangle A''B''C''$ .
3. Describe in a single transformation how the pre-image  $\triangle ABC$  can be formed into the image  $\triangle A''B''C''$ .

# Using Technology to Explore Geometric Transformations

## Key to Quiz C

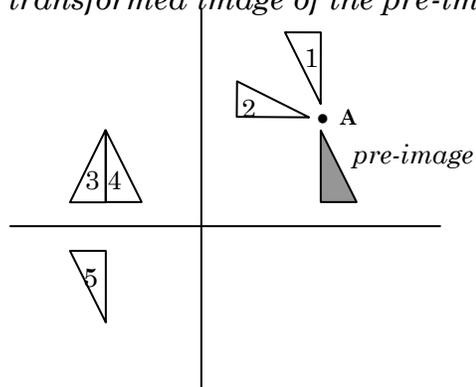
1. dilation scale factor 2
2. dilation scale factor 1.5
3. dilation scale factor 3

# Using Technology to Explore Geometric Transformations

## Transformations Unit Test

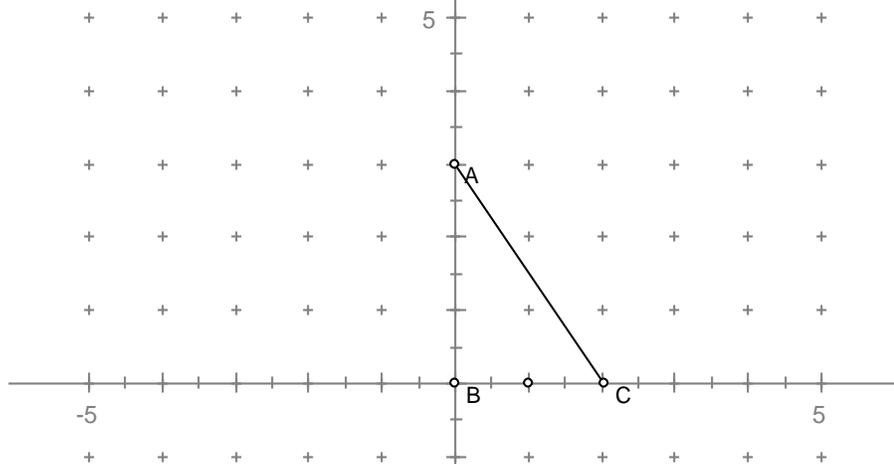
1. *MATCHING* – Write the number of the transformed image of the pre-image, that best matches the description.

- \_\_\_\_\_ a. translation
- \_\_\_\_\_ b.  $180^\circ$  rotation about the origin
- \_\_\_\_\_ c.  $180^\circ$  rotation about point A
- \_\_\_\_\_ d. reflection across the y-axis
- \_\_\_\_\_ e. reflection across  $y = x$



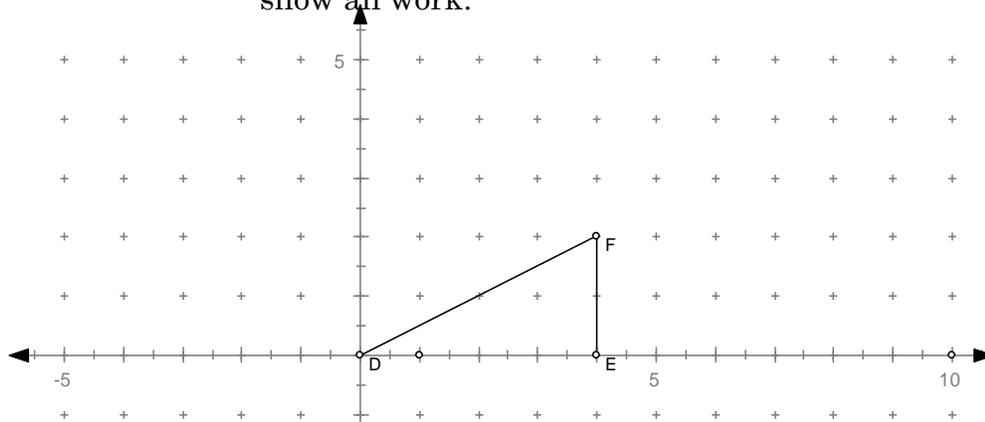
2. Describe what happens to the  $x$  &  $y$  coordinates when a pre-image is
- a. rotated  $180^\circ$ .
  - b. reflected across the  $x$ -axis.

3. *Transform and Justify*
- a. Reflect triangle ABC across the  $y$ -axis.
  - b. Justify that the image is congruent to the pre-image. Explain and show all work.



# Using Technology to Explore Geometric Transformations

- c. Dilate triangle DEF by a scale factor of  $\frac{1}{2}$ .
- d. Justify that the image is similar to the pre-image. Explain and show all work.



## 4. *Commutativity*

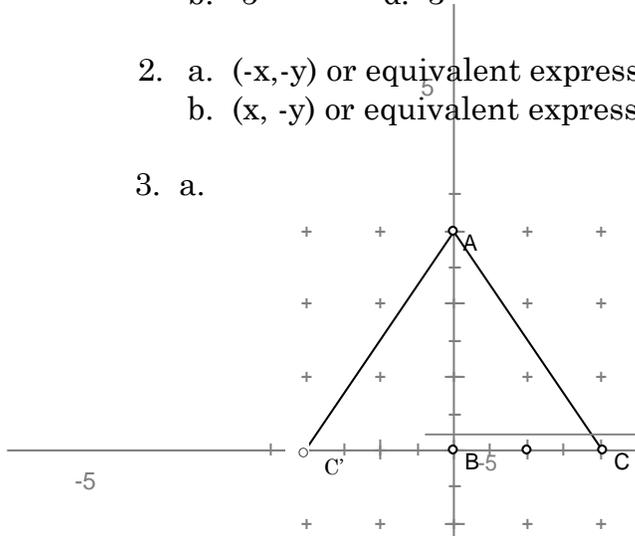
- a. Draw one example, complete with explanation, of a composition of geometric transformations that is commutative.
- b. Draw one example, complete with explanation, of a composition of geometric transformations that is NOT commutative.

# Using Technology to Explore Geometric Transformations

## ANSWER KEY for Transformations Test

1. a. 4                      c. 1                      e. 2  
 b. 5                        d. 3
2. a.  $(-x, -y)$  or equivalent expression  
 b.  $(x, -y)$  or equivalent expression

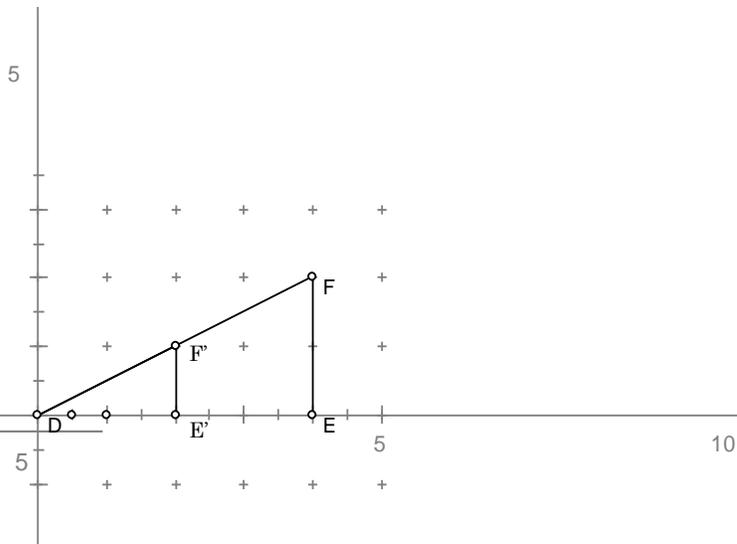
3. a.



b.  $AB = 3$ ;  $BC = 2$ ;  $AC = \sqrt{13}$ ;  
 $A'B' = 3$ ;  $B'C' = 2$ ;  $A'C' = \sqrt{13}$

Since three pairs of corresponding sides are congruent, the triangles (the pre-image and image) are congruent by the SSS Theorem.

c.



d. Since EF and DE are perpendicular, angle E is a right angle. Likewise, since E'F' and D'E' are perpendicular, angle F'E'D' is a right angle. Since both are right angles, angle E and angle F'E'D' are congruent. Also, angle FDE is congruent to angle F'D'E'. Therefore, the triangles (the pre-image and image) are similar by the AA Theorem.

4.

	2	1
Diagram	Contains clear composite transformation which is (or is not) commutative	Contains composite transformation which is (or is not) commutative
Explanation	Clear explanation using sophisticated mathematical knowledge	Explanation contains a minor error

# Using Technology to Explore Geometric Transformations

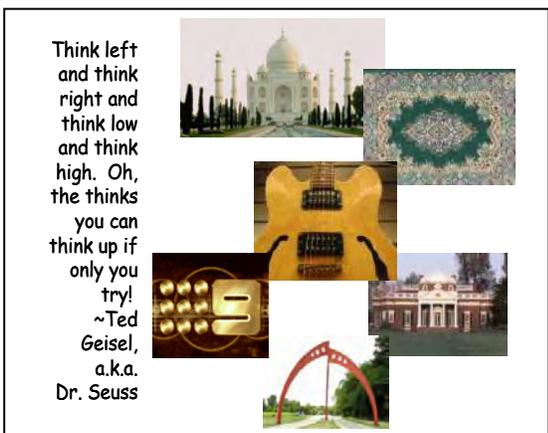
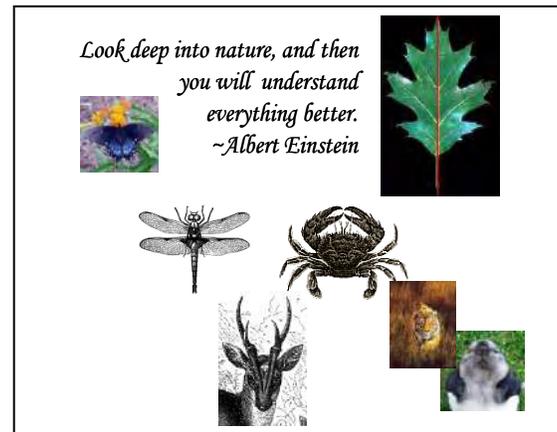
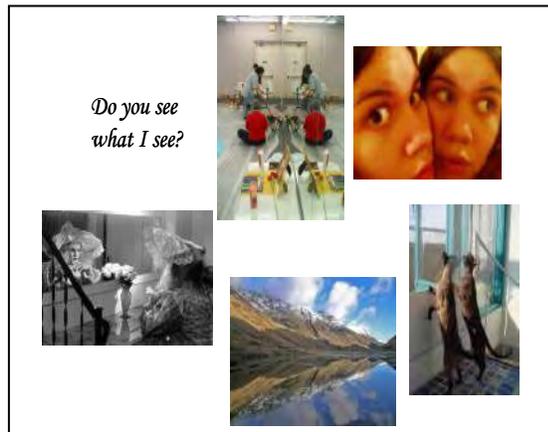
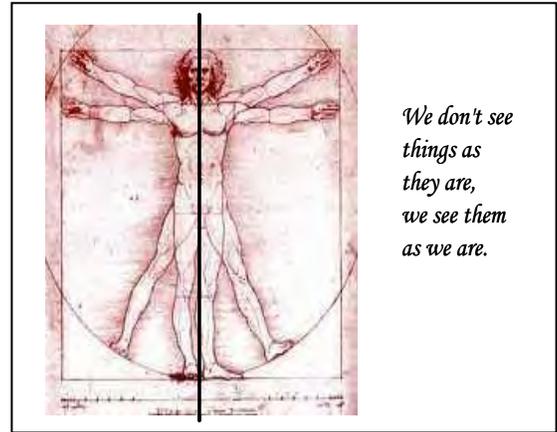
## Unit Test Reflection Checklist

	Fully	Partially	Not At All
I explained at least 3 strengths that I demonstrated on this test.			
I explained all major misunderstandings I had when I took this test.			
I corrected all errors on my test.			

## **Appendix B**

### **Sample PowerPoint Presentation**

# Using Technology to Explore Geometric Transformations



# Using Technology to Explore Geometric Transformations



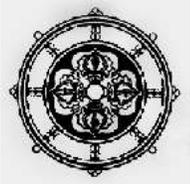
*Clocks slay time...  
time is dead as long as it is  
being clicked off by little  
wheels;  
only when the clock stops  
does time come to life.  
~William Faulkner*

*People from a planet without flowers would  
think we must be mad with joy the whole time  
to have such things about us.*






*Art picks up where nature ends.*

Form depends on function.







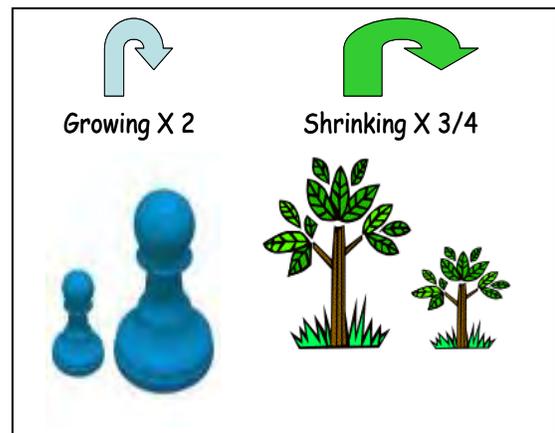
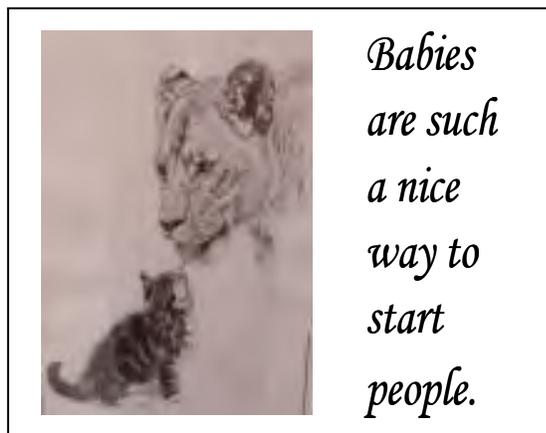
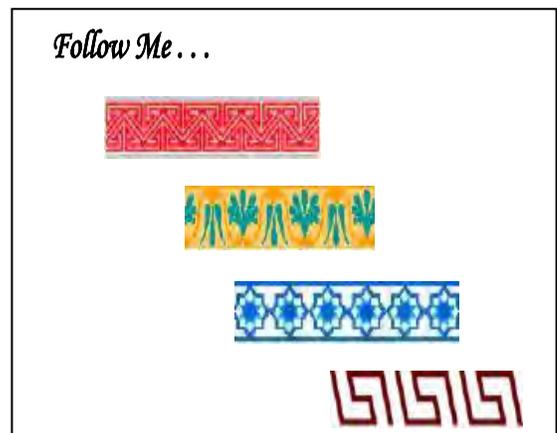
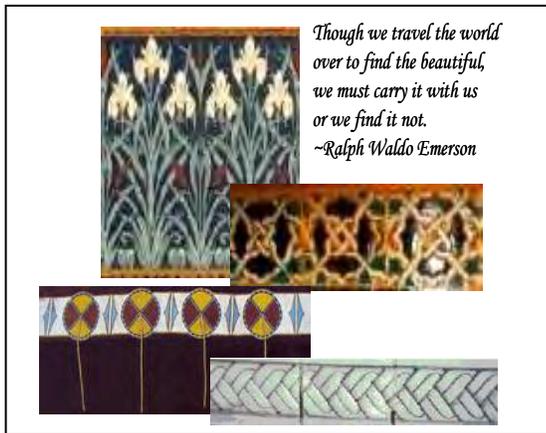

*If you are seeking  
creative ideas,  
go out walking.  
Angels whisper  
to a man  
when he goes  
for a walk.*

*Lack of activity destroys the good  
condition of every human being,  
while movement and methodical  
physical exercise save it and  
preserve it.  
~Plato*





# Using Technology to Explore Geometric Transformations



Now What Do You Know About Transformations?

# Using Technology to Explore Geometric Transformations



## Delaware Model Unit Gallery Template

This unit has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model unit has undergone a rigorous peer review and jurying process to ensure alignment to selected Delaware Content Standards.

**Unit Title: Functions and Their Graphs**

**Designed by: Christine Bichler and Takashi Rhoulac**

**District: Innovative Schools**

**Content Area: Calculus with Pre-Calculus**

**Grade Level(s): 9-12**

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**Summary of Unit:** In this Calculus with Pre-Calculus unit, students will learn about Functions and their graphs. Students will learn how functions can be used to model and solve real-world problems fitting mathematical data to functions. Students will be able to write and evaluate a function as well as combinations of functions. Students will sketch, analyze, and transform graphs of functions.

### Stage 1 – Desired Results

What students will know, do, and understand

---

#### Common Core Standards

- Include those addressed in Stage 3 and assessed in Stage 2.

Use the structure of an expression to identify ways to rewrite it. *For example, see  $x^4 - y^4$  as  $(x^2)^2 - (y^2)^2$ , thus recognizing it as a difference of squares that can be factored as  $(x^2 - y^2)(x^2 + y^2)$ .*

**CC.9-12.A.SSE.2**

Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. **CC.9-12.A.APR.1**

Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If  $f$  is a function and  $x$  is an element of its domain, then  $f(x)$  denotes the output of  $f$  corresponding to the input  $x$ . The graph of  $f$  is the graph of the equation  $y = f(x)$ . **CC.9-12.F.IF.1**

Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context. **CC.9-12.F.IF.2**

For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. *Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.\** **CC.9-12.F.IF.4**

Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. *For example, if the function  $h(n)$  gives the number of person-hours it takes to assemble  $n$  engines in a factory, then the positive integers would be an appropriate domain for the function.\** **CC.9-12.F.IF.5**

Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.\* **CC.9-12.F.IF.6**

Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.\* **CC.9-12.F.IF.7**

- a. Graph linear and quadratic functions and show intercepts, maxima, and minima. **CC.9-12.F.IF.7a**

Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. **CC.9-12.F.IF.8**

- a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. **CC.9-12.F.IF.8a**

Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). *For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.* **CC.9-12.F.IF.9**

Write a function that describes a relationship between two quantities.\* **CC.9-12.F.BF.1**

- a. Determine an explicit expression, a recursive process, or steps for calculation from a context. **CC.9-12.F.BF.1a**
- b. Combine standard function types using arithmetic operations. *For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.* **CC.9-12.F.BF.1b**
- c. (+) Compose functions. *For example, if  $T(y)$  is the temperature in the atmosphere as a function of height, and  $h(t)$  is the height of a weather balloon as a function of time, then  $T(h(t))$  is the temperature at the location of the weather balloon as a function of time.* **CC.9-12.F.BF.1c**

Identify the effect on the graph of replacing  $f(x)$  by  $f(x) + k$ ,  $k f(x)$ ,  $f(kx)$ , and  $f(x + k)$  for specific values of  $k$  (both positive and negative); find the value of  $k$  given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. *Include recognizing even and odd functions from their graphs and algebraic expressions for them.* **CC.9-12.F.BF.3**

Find inverse functions. **CC.9-12.F.BF.4**

- a. Solve an equation of the form  $f(x) = c$  for a simple function  $f$  that has an inverse and write an expression for the inverse. *For example,  $f(x) = 2x^3$  or  $f(x) = (x+1)/(x-1)$  for  $x \neq 1$ .* **CC.9-12.F.BF.4a**
- b. (+) Verify by composition that one function is the inverse of another. **CC.9-12.F.BF.4b**
- c. (+) Read values of an inverse function from a graph or a table, given that the function has an inverse. **CC.9-12.F.BF.4c**
- d. (+) Produce an invertible function from a non-invertible function by restricting the domain. **CC.9-12.F.BF.4d**

### Big Idea(s)

- Transferable core concepts, principles, theories, and processes from the Content Standards

Mathematical data can be modeled with functions and their graphs.

### Unit Enduring Understanding(s)

- Full-sentence, important statements or generalizations that specify what students should understand from the Big Ideas (s) and/or Content Standards and that are transferable to new situations

Students will understand that.....

- Functions and their graphs model mathematical problems

### **Unit Essential Questions(s)**

- Open-ended questions designed to guide student inquiry and learning

How are functions recognized, represented, and evaluated?

How are graphs of functions sketched and analyze?

How can graphs of functions be transformed?

How can functions be combined?

How to find inverse functions?

How can functions be used to model mathematical data?

### **Knowledge and Skills**

- Needed to meet Content Standards addressed in Stage 3 and assessed in Stage 2

#### **Students will know...**

- whether relations between two variables are functions.
- how to use function notation and evaluate functions.
- how to find the domains of functions.
- how use the Vertical Line Test for functions
- how to find the zeros of functions.
- how to determine intervals on which functions are increasing or decreasing and determine relative maximum and relative minimum values of functions.
- how to identify and graph linear functions
- how to identify and graph step and other piecewise-defined functions
- how to identify even and odd functions.
- how to recognize graphs of common functions.
- vertical and horizontal shifts effects on sketching graphs of functions.
- how reflections cab be used to sketch graphs of functions.
- how nonrigid transformations can be used to sketch graphs of functions.
- how to add, subtract, multiply and divide functions.
- how to find the composition of one function with another function.
- how to find inverse functions informally and verify that two functions are inverse functions of each other.
- how to use graphs of functions to determine whether functions have inverse functions.
- how to use graphs of functions to determine whether functions have inverse functions.
- how to use the Horizontal Line Test to determine if functions are one-on-one.
- how to find inverse functions analytically.
- how to use the *regression* feature of a graphing utility to find the equation of a least squares regression line.

#### **Students will be able to...**

- use functions to model and solve real-life problems
- use combinations and compositions of functions to model and solve real-life problems.
- use mathematical models to approximate sets of data points.
- write mathematical models for direct variation.
- write mathematical models for direct variations as an  $n$ th power.
- write mathematical models for inverse variation.
- write mathematical models for joint variatio

## Stage 2 – Assessment Evidence

Evidence that will be collected to determine whether or not Desired Results are achieved

### Suggested Performance/Transfer Task(s)

- Performance/Transfer tasks as evidence of student proficiency

1. The weekly cost  $C$  of producing  $x$  units in a manufacturing process is given by  $C(x) = 60x + 750$

The number of units  $x$  produced in  $t$  hours is  $x(t) = 50t$

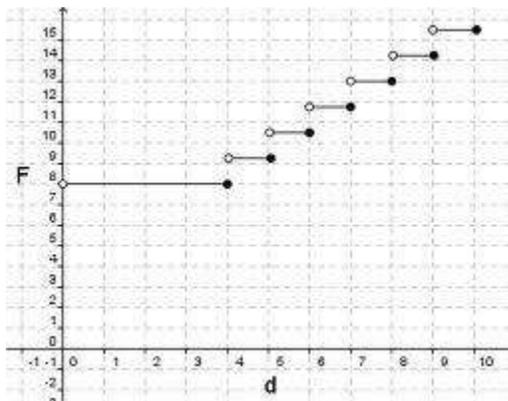
- a) Find and interpret  $C(x(t))$
- b) Find the number of units produced in 4 hours. Show your calculations
- c) Produce a graph of the cost as a function of time. Use your graph to estimate the time that must elapse until the cost increases to \$15,000.

#### Rubric:

- Scoring guide to evaluate performance/transfer tasks used as evidence of student proficiency

	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>
Part a			Correctly write the compound function	Incorrectly writes the compounded function
Part b		Student used the function from part a and showed their calculations with the correct answer	Student made a minor in their calculations	Calculations are completely wrong
Part c	Correctly graphed the function with labels and correctly estimated the solution	Correctly graphed the function with labels and did not estimate the solution correctly Correctly graphed the function but did not label the graph and did estimate the solution correctly	Made minor errors in graphing and estimated the solution correctly Graphed but did not provide labels and did not estimate the solution	Show little to no attempt at graphing the function and estimating the solution

2. Determine whether the following diagram is a function. Give proof to verify your answer.



3. An auditorium has 1200 seats. For the past several shows, the auditorium has been filled to capacity. Tickets currently cost \$5 and the owner wants to increase the ticket prices. She estimates that for each \$.50 increase in price, 100 fewer people will attend. What ticket price will maximize the profit?

**Rubric for problems 2 and 3:**

- Scoring guide to evaluate performance/transfer tasks used as evidence of student proficiency

	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>
	Student provide a correct answer with work to support the answer	Students have made minor mathematical errors	Attempt was made but their were major mathematical flaws	No attempt was made

**Other Evidence**

- Varied evidence that checks for understanding (e.g., tests, quizzes, prompts, student work samples, observations and supplements the evidence provided by the task)

Capstones  
Lesson quizzes  
Unit Test

**Student Self-Assessment and Reflection**

- Opportunities for self-monitoring learning ( e.g., reflection journals, learning logs, pre- and post-tests, self-editing – based on ongoing formative assessments)

Lesson Exercises  
Review Exercises  
Writing about Concepts  
Textbook Chapter Test

## Stage 3 – Learning Plan

(Design learning activities to align with Stage 1 and Stage 2 expectations)

### Key learning events needed to achieve unit goals

- Instructional activities and learning experiences needed to align with Stage 1 and Stage 2 expectations

Include these instructional elements when designing an effective and engaging learning plan for ALL students:

- \*Align with expectations of Stage 1 and Stage 2
- \*Scaffold in order to acquire information, construct meaning, and practice transfer of understanding
- \*Include a wide range of research-based, effective, and engaging strategies
- \*Differentiate and personalize content, process, and product for diverse learners
- \*Provide ongoing opportunities for self-monitoring and self-evaluation

### ***Lesson 1***

*General Topics:* Functions

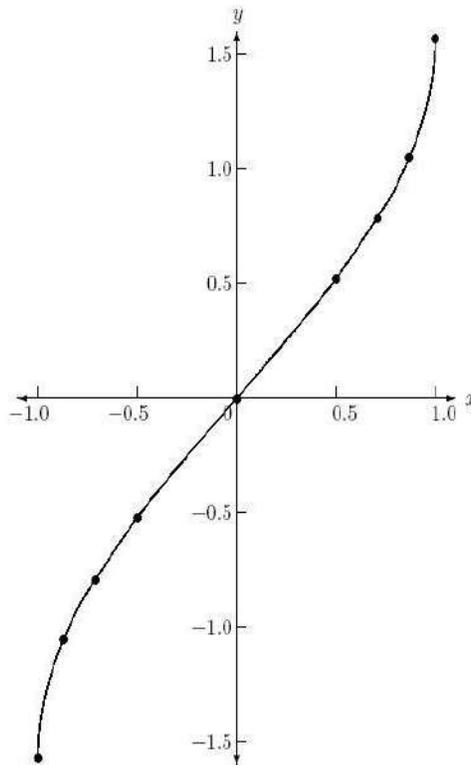
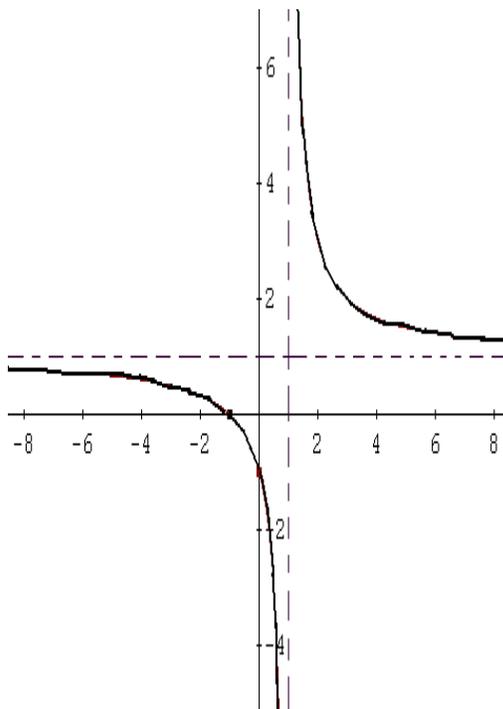
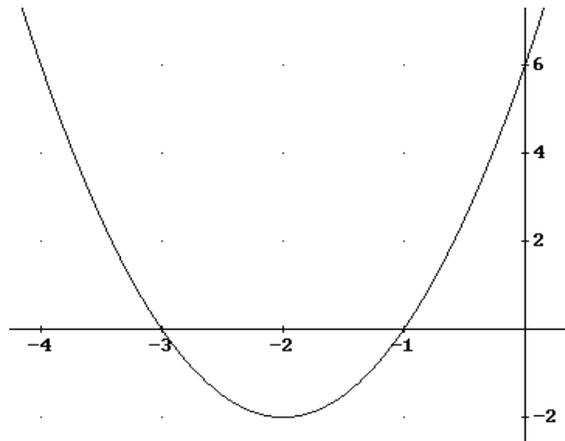
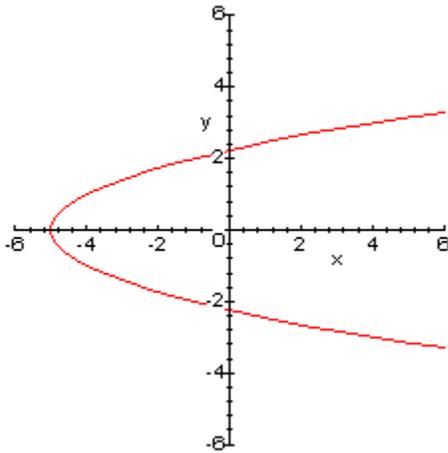
1. Discuss and review/ define the following vocabulary terms when applicable within the lesson:  
*function, characteristics of a function, domain, range, relation, independent variable, dependent variable, function notation, piecewise-defined function, implied domain. E1, R*
2. Provide direct instruction along with example problems showing students how to identify functions, represent functions verbally, numerically and analytically. Students must also know what a piecewise function is. **E1**
3. Have students work in pairs to complete even exercise problems. Discuss results as a class using the Interactive write Board. Print for special needs students. **T, O**
4. Students will complete Writing about Concepts and Capstone problems. (Student Self-Assessment and Reflection). **E2**
5. For homework, students will complete vocabulary review and problems in which student will practice with functions. **E1**
6. Students should complete quiz lesson 1:1

### ***Lesson 2***

*General Topics:* Analyzing Graphs of Functions

1. Discuss and review/ define the following vocabulary terms when applicable within the lesson:  
*graph of a function, vertical line test, zeros of a function, increasing, decreasing, constant as it relates to functions, relative minimum, relative maximum. E1, R*
2. Provide direct instruction to show students how to:
  - use the vertical line test to determine a function
  - find the zeros of a function
  - determine whether a function is increasing, decreasing or constant
  - graph a piecewise function

- identify even and odd functions **E1**
3. Have students work in pairs to complete exercise problems. Discuss results as a class using the Interactive write Board. Print for special needs students. **T, O**
  4. Also have students sort diagrams in piles of functions and not functions. Some example problems are below. Have students use the vertical line test to determine if the graph is a function. If so, students should be able to find the zeros of a function, determine whether a function is increasing, decreasing or constant and identify even and odd functions. **T, O**



- Students will complete Writing about Concepts and Capstone problems in their Math Journals (Student Self-Assessment and Reflection). **E2**
- For homework, students will complete the vocabulary review and other example problems that will allow them to work with functions analytically and graphically. **E1**
- Students should complete quiz lesson 1:2

### **Lesson 3**

*General Topics:* Transformations of Functions

- Discuss and review/ define the following vocabulary terms when applicable within the lesson:  
*vertical and horizontal shifts, reflections, rigid transformations, nonrigid transformations, vertical stretch and shrink, horizontal stretch and shrink.* **E1, R**
- Provide direct instruction using examples to show students how to perform rigid and nonrigid transformations. **E1**
- Have students work in pairs to with Geometer's Sketchpad to experiment with various shifts, reflections, stretches and shrinkage. Have students identify/ sketch the original function and explain what transformation took place. **T, O**
- Students will complete Writing about Concepts and Capstone problems in their Math Journals (Student Self-Assessment and Reflection). **E2**
- Provide a homework problem in which student review vocabulary as well as practice rigid and nonrigid transformations. **E1**
- Students should complete quiz lesson 1:3

### **Lesson 4**

*General Topics:* Combinations of Functions

- Discuss and review/ define the following vocabulary terms when applicable within the lesson:  
*Sum, difference, product and quotient of functions, composition of a function* **E1, R**
- Provide direct and instruction to model and explain the arithmetic compositions of a function as well as composite functions. **E1**
- Have students work in pairs to complete exercise problems. Discuss results as a class using the Interactive write Board. Print for special needs students. **T, O**
- Students will complete Writing about Concepts and Capstone problems in their Math Journals (Student Self-Assessment and Reflection). **E2**
- For homework, students should complete the vocabulary review along with problems that allow students practice with composite functions. **E1**
- Students should complete quiz lesson 1:4

### **Lesson 5**

*General Topics:* Inverse Functions

- Discuss and review/ define the following vocabulary terms when applicable within the lesson:  
*inverse functions,  $f^{-1}$ , horizontal line test, one-to-one functions* **E1, R**

2. Provide examples and direct instruction to help students understand how to obtain the inverse function and use the horizontal line test. Students should also be able to determine if a function is one-to-one. **E1**
3. Have students work in pairs to complete exercise problems. Discuss results as a class using the Interactive write Board. Print for special needs students. **T, O**
4. Students will complete Writing about Concepts and Capstone problems in their Math Journals (Student Self-Assessment and Reflection). **E2**
5. Provide a homework problem in which student will practice with functions. **E1**
6. Students should complete quiz lesson 1:5

### ***Lesson 6***

*General Topics:* Mathematical Modeling and Variation

1. Have students brainstorm how functions can be used in real-life problems. **E1, R**
2. Have students work in pairs to complete exercise problems. Have students complete problems from several different disciplines to ensure an greater understanding of functions in real word situations. Discuss results as a class. **T, O**
3. Students will complete Writing about Concepts and Capstone problems in their Math Journals (Student Self-Assessment and Reflection). **E2**
4. Provide a homework in which student will gain additional practice with functions in the real world. **E1**
5. Students should complete quiz lesson 1:6

### ***Lesson Review and P.S. Problem Solving***

*General Topics:* Review and problem solving

1. Students will work in pairs to complete review excises and problem solving set at the end of the unit. **E2**
2. Students should complete the Unit Test.
3. Students will work with a partner to make corrections on their unit test **E2**

The acronym WHERETO summarizes key elements to consider when designing an effective and engaging learning plan.

W – Help the students know Where the unit is going and What is expected? Help the teachers know Where the students are coming from (prior knowledge, interests)

H – Hook all students and Hold their interest?

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#### *Code*

*IP = international education perspective*

*IL = information literacy*

*WR = Workplace readiness/21<sup>st</sup> century skills*

*FA = a formative assessment, used to check for understanding*

## Resources and Teaching Tips

- A variety of resources are included (texts, print, media, web links)
- Help in identifying and correcting student misunderstandings and weaknesses

### Print

Larson, Ron, Edwards, Bruce, & Falvo, David (2012). *Calculus with Precalculus: a one year course*. Boston, MA: Brooks/Cole.

### Web Links

<http://www.cengagebrian.com>

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### Media

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### Differentiation

- Stage 2 and 3 allow students to demonstrate understanding with choices, options, and/or variety in the products and performances without compromising the expectations of the Content Standards.
- Instruction is varied to address differences in readiness, interest, and/or learning profiles.
- Accommodations and differentiation strategies are incorporated in the design of Stage 2 and 3.

The time period needed to complete this unit will vary depending upon student achievement levels and class grouping.

Provide additional examples and use additional exercise problems to provide additional support when needed.

## Design Principles for Unit Development

At least one of the design principles below is embedded within unit design

- **International Education** - the ability to appreciate the richness of our own cultural heritage and that of other cultures in to provide cross-cultural communicative competence.
- **Universal Design for Learning** - the ability to provide multiple means of representation, expression and engagement to give learners various ways to acquire and demonstrate knowledge.
- **21<sup>st</sup> Century Learning** – the ability of to use skills, resources, & tools to meet the demands of the global community and tomorrow’s workplace. (1) Inquire, think critically, and gain knowledge, (2) Draw conclusions make informed decisions, apply knowledge to new situations, and create new knowledge, (3) Share knowledge and participate ethically and productively as members of our democratic society, (4) Pursue personal and aesthetic growth. (AASL,2007)

**Universal Design for Learning** – using multiply representations of a function: equations, tables, and graphs

**21<sup>st</sup> Century Learning – Student solve application, real-world problems, and conceptual problems throughout the practice exercise and in the problem solving section.**

### **Technology Integration**

The ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information

- **8<sup>th</sup> Grade Technology Literacy** - the ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information to improve learning in all subject areas and to acquire lifelong knowledge and skills in the 21st Century (SETDA, 2003).

TI – Calculator applications will be integrated throughout the book

### **Content Connections**

Content Standards integrated within instructional strategies

## Delaware Model Unit Gallery Template

This unit has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model unit has undergone a rigorous peer review and jurying process to ensure alignment to selected Delaware Content Standards.

**Unit Title: Trigonometric Functions**

**Designed by: Christine Bichler and Takashi Rhoulac**

**For: Innovative Schools**

**Content Area: Calculus with Pre-Calculus**

**Grade Level(s): 9-12**

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**Summary of Unit:** In this Calculus with Pre-Calculus unit, students will learn about Trigonometric functions. Students will use Trigonometric functions to find relationships between sides and angles of triangles. Students will be able to model quantities that are periodic. Trigonometric Functions will be used to model real-life quantities.

### Stage 1 – Desired Results

What students will know, do, and understand

---

Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle. **CC.9-12.F.TF.1**

Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle. **CC.9-12.F.TF.2**

(+) Use special triangles to determine geometrically the values of sine, cosine, tangent for  $\pi/3$ ,  $\pi/4$  and  $\pi/6$ , and use the unit circle to express the values of sine, cosine, and tangent for  $\pi-x$ ,  $\pi+x$ , and  $2\pi-x$  in terms of their values for  $x$ , where  $x$  is any real number. **CC.9-12.F.TF.3**

(+) Use the unit circle to explain symmetry (odd and even) and periodicity of trigonometric functions. **CC.9-12.F.TF.4**

Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.\* **CC.9-12.F.TF.5**

(+) Understand that restricting a trigonometric function to a domain on which it is always increasing or always decreasing allows its inverse to be constructed. **CC.9-12.F.TF.6**

(+) Use inverse functions to solve trigonometric equations that arise in modeling contexts; evaluate the solutions using technology, and interpret them in terms of the context.\* **CC.9-12.F.TF.7**

Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles. **CC.9-12.G.SRT.6**

Explain and use the relationship between the sine and cosine of complementary angles. **CC.9-12.G.SRT.7**

Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.\* **CC.9-12.G.SRT.8**

### **Big Idea(s)**

Understand how the concept of function can be used to interpret, analyze and model functions that emerge from contexts including those contexts that are purely mathematical.

Similarity transformations (rigid motions followed by dilations) define similarity in the same way that rigid motions define congruence, thereby formalizing the similarity ideas of "same shape" and "scale factor" developed in the middle grades.

These transformations lead to the criterion for triangle similarity that two pairs of corresponding angles are congruent.

The definition of trigonometric ratios is not only useful in solving right triangle problems but can also be applied to general triangles.

### **Unit Enduring Understanding(s)**

Students will understand that.....

- Trigonometric Functions can be used to model and solve real-life mathematical problems

### **Unit Essential Questions(s)**

How can angles be described, radian measures be used, and degree measures be used?

How can trigonometric functions be evaluate using the unit circle?

How can trigonometric functions be evaluated for acute angles and how can fundamental trigonometric identities be used?

How can reference angles be used to evaluate trigonometric functions of any angle?

How can the graphs of sine and cosine be sketched?

How can the graphs of tangent, cotangent, secant, and cosecant be sketched?

How can inverse trigonometric functions be evaluated?

How are real-life problems involving right triangles, directional bearings, and harmonic motion solved?

### **Knowledge and Skills**

#### **Students will know...**

- how to describe angles.
- how to use radian measure.
- how to use degree measure.
- how to identify a unit circle and describe its relationship to real numbers.
- how to use the domain and period to evaluate sine and cosine functions.
- how to use a calculator to evaluate trigonometric functions.
- how to evaluate trigonometric functions of acute angles.
- how to use fundamental trigonometric identities.
- how to evaluate trigonometric functions of any angle.
- how to use reference angles to evaluate trigonometric functions.
- how to use amplitude and period to help sketch the graphs of sine and cosine functions.

- how to translations of the graphs of sine and cosine functions.

### Students will be able to...

- use angles to model and solve real-life problems.
- evaluate trigonometric functions using the unit circle.
- use sine and cosine functions to model real-life data.
- use trigonometric functions to model and solve real-life problems.
- evaluate and graph the inverse sine function, the other inverse trigonometric functions, and the compositions of trigonometric functions
- sketch the graphs of sine and cosine functions, tangent functions, cotangent functions, secant and cosecant functions, and damped trigonometric functions.
- solve real-life problems involving right triangles.
- solve real-life problems involving directional bearings.
- solve real-life problems involving harmonic motion

## Stage 2 – Assessment Evidence

Evidence that will be collected to determine whether or not Desired Results are achieved

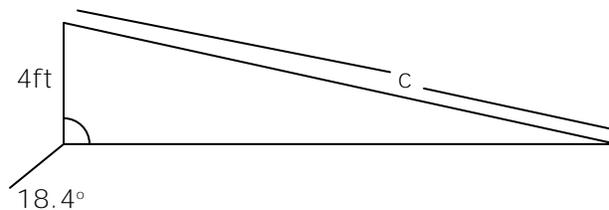
### Suggested Performance/Transfer Task(s)

- Performance/Transfer tasks as evidence of student proficiency

1.

	<p>Juan is standing due west of Charlie. They are 50 meters apart. An island is spotted and the bearings from Charlie and Juan are <math>N40^\circ W</math> and <math>N30^\circ E</math> respectively. Find the distance ? of the island from the line formed between Juan and Charlie. Show your work.</p>
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2. Find the length of the skateboard ramp  $c$ , shown below.



3. In right triangle trigonometry, explain why  $\sin 30^\circ = \frac{1}{2}$  regardless of the size of the triangle.

### Rubric(s)

- Scoring guide to evaluate performance/transfer tasks used as evidence of student proficiency

	3	2	1	0
	Student provide a correct answer with work to support the answer	Students have made minor mathematical errors	Attempt was made but their were major mathematical flaws	No attempt was made

### Other Evidence

- Varied evidence that checks for understanding (e.g., tests, quizzes, prompts, student work samples, observations and supplements the evidence provided by the task)

Capstones

Lesson quizzes

Unit Test

### Student Self-Assessment and Reflection

- Opportunities for self-monitoring learning ( e.g., reflection journals, learning logs, pre- and post-tests, self-editing – based on ongoing formative assessments)

Lesson Exercises

Review Exercises

Writing about Concepts

Textbook Chapter Test

Problem Solving problems

## Stage 3 – Learning Plan

(Design learning activities to align with Stage 1 and Stage 2 expectations)

### Key learning events needed to achieve unit goals

- Instructional activities and learning experiences needed to align with Stage 1 and Stage 2 expectations

Include these instructional elements when designing an effective and engaging learning plan for ALL students:

- \*Align with expectations of Stage 1 and Stage 2
- \*Scaffold in order to acquire information, construct meaning, and practice transfer of understanding
- \*Include a wide range of research-based, effective, and engaging strategies
- \*Differentiate and personalize content, process, and product for diverse learners
- \*Provide ongoing opportunities for self-monitoring and self-evaluation
- Identify the basic ratios for the six trigonometric functions

- Identify the graphs of the six trigonometric functions
- Geometer's Sketchpad
- Texas Instrument Graphing Calculator

## **Lesson 1**

*General Topics:* Radian and Degree Measure

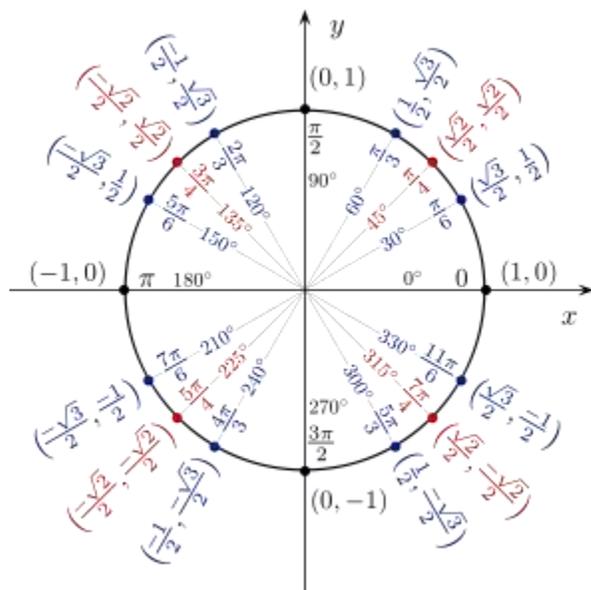
1. Discuss and review/ define the following vocabulary terms as encountered within the context of the lesson:
2. *trigonometry, angle, initial side, terminal side, vertex, standard position, positive angles, negative angles,  $\theta$ (theta),  $\alpha$  (alpha),  $\beta$  (beta),  $\pi$  (pi)coterminal, measure of an angle (acute, obtuse), radian measures, central angles, complementary, supplementary, degrees, arc length ( $S = 2\pi r$ ). **E1, R***
3. Use direct instruction to model for students how to find the measure of an angle and how to convert the measure to either radian to degree measure depending upon the initial measure. Students should be shown how to derive the common angle/ radian measures  $\frac{\pi}{6}$  (30),  $\frac{\pi}{4}$ , (45)  $\frac{\pi}{3}$  (60),  $\frac{\pi}{2}$  (90),  $\pi$  (180),  $2\pi$ (360). Students should also be shown how to find the coterminal angle. Demonstrate on the graphing calculator how to convert between radian and degree measures. **E1**
4. Students will work with a partner and sketch diagrams using Geometer's Sketch Pad. Students should draw angles and identify the initial and terminal sides as well as classify them as acute or obtuse and positive or negative. Their partner should draw the corresponding coterminal angle. **E2**
5. Have students work in pairs to complete even exercise problems. Discuss results whole class using the Interactive write Board to draw figures. Print for special needs students. **T, O**
6. Students complete writing about concepts and capstone problems (Student Self-Assessment and Reflection). **E2**
7. For homework, students should complete the fill in the blanks section problems 1-10 to review vocabulary terms. Additional odd problems should be assigned to provide students with an independent opportunity. A real-world problem should also be assigned from problems 104 – 109 to allow students the opportunity to make practical application. **E1**
8. Students should complete quiz lesson 9:1

## **Lesson 2**

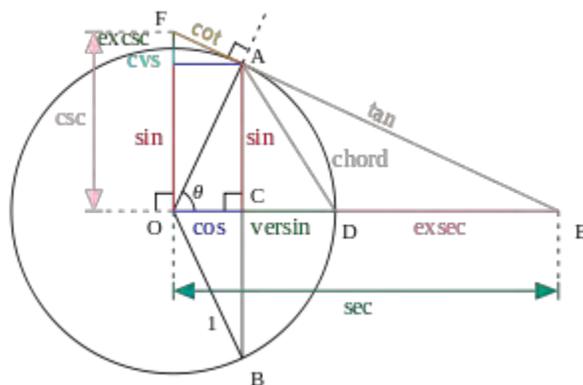
*General Topics:* Trigonometric Functions: The Unit Circle

1. Discuss and review/ define the following vocabulary terms as encountered within the context of the lesson:  
*unit circle, trigonometric functions – sine, cosine, tangent, cotangent, secant, cosecant and (their abbreviations) sin, cos, tan, cot, sec, sec. **E1, R***
2. Direct instruction should be provided to explain how the formula for the unit circle:  $x^2 + y^2 = 1$  is derived. Students should be given a copy of the unit circle and label corresponding information as it is presented. Students should also be shown how the points (x,y) on the unit circle are determined. **E1**

- Provide handouts with practice unit circle problems where the students identify the point  $(x,y)$  for the corresponding real number. The diagram below should be shared with students. **E1**



- Direct instruction should be provided to introduce the six trigonometric functions and corresponding points on the unit circle. Similar to the figure below.



- Have students work in pairs to complete problems 28 – 34 even. Discuss results as a class using the Interactive write Board. Print for special needs students. **T, O**
- Students complete writing about concepts and capstone problems (Student Self-Assessment and Reflection). **E2**
- For homework students should complete problems 5 – 8 and 27 – 33 odd. **E1**
- Students should complete quiz lesson 9:2

### Lesson 3

*General Topics:* Right Triangle Trigonometry

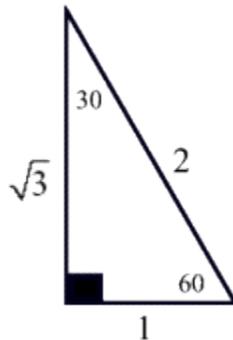
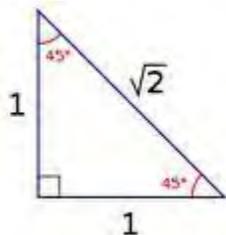
- Discuss and review/ define the following vocabulary terms as encountered within the context of the lesson:

*Hypotenuse, opposite side, adjacent side and (their abbreviations) opp, adj, hyp*

**E1, R**

- Have students complete problems 1 – 4 to review vocabulary terms.

- Provide direct instruction and to explain the special right triangles 30-60-90 and 45-45-90. Have a handout with the triangles drawn and have students complete angle measures and side lengths to use as a reference. **E1**



- Have students complete problems 5 – 8 with a partner to ensure they are able to find the values of the six trigonometric functions. Discuss results as a class using the Interactive write Board. Print for special needs students. **T, O**
- Students complete writing about concepts and capstone problems (Student Self-Assessment and Reflection). **E2**
- For homework, have students complete problems 9 – 29 odd. Students should also complete problems 71 – 79 for a real world application of trigonometry. **E1**
- Students should complete quiz lesson 9:3

#### **Lesson 4**

*General Topics:* Trigonometric Functions of Any Angles

- Discuss and review/ define the following vocabulary terms as encountered within the context of the lesson:  
*Quadrant, reference angle* **E1, R**
- Provide direct instruction on how to define the trigonometric functions of any angle using the formula  $r = \sqrt{x^2 + y^2} \neq 0$  where (x,y) is a point on the terminal side. **E1, R**
- Have students complete examples and practice problems identifying trigonometric functions using any angles and evaluate them. **E1**
- Have students work in pairs to complete even exercise problems. Discuss results as a class using the Interactive write Board. Print for special needs students. **T, O**
- Students complete writing about concepts and capstone problems (Student Self-Assessment and Reflection). **E2**
- For homework, have students complete problems 1 – 17 odd in addition to problem 100 to provide a real word context of finding the trigonometric values of any angle. **E1**
- Students should complete quiz lesson 9:4

#### **Lesson 5**

*General Topics:* Graphs of Sine and Cosine Functions

- Discuss and review/ define the following vocabulary terms as encountered within the context of the lesson:

- Sine curve, one cycle, key points in one period, amplitude, reflection, phase shift, cosine graph, horizontal translation, vertical translation* **E1, R**
2. Provide direct instruction to students as to how the graphs of Sine and Cosine functions are created for one cycle. Use a graphing calculator overhead to project the images and allow the students to see the differences in the graphs **E1, R**
  3. Have students construct and label the key points using graph paper. **E1**
  4. After students construct their own graphs, show students how to graph the sine and cosine functions using their graphing calculators and allow students to check their work. **E1**
  5. Provide examples and practice problems using graphs of sine and cosine functions **E1**
  6. Have students work in pairs to complete problems using Geometer's Sketch Pad. Review whole class. **T, O**
  7. Students complete writing about concepts and capstone problems (Student Self-Assessment and Reflection). **E2**
  8. For homework, have students complete problems 1 – 10 all. Students should also complete problems 95 – 97 for real world application. **E1**
  9. Students should complete quiz lesson 9:5

### **Lesson 6**

*General Topics:* Graphs of Other Trigonometric Functions

1. Discuss and review/ define the following vocabulary terms as encountered within the context of the lesson:  
*domain, symmetry, asymptotes, reciprocal* **E1, R**
2. Discuss whole class the graphs of tangent, cotangent, secant, cosecant trigonometric functions. Use a graphing calculator overhead to project the images and allow the students to see the differences in the graphs. **E1, R**
3. Provide examples and practice problems using graphs of tangent, cotangent, secant, cosecant trigonometric functions. **E1**
4. Have students work in pairs to complete even exercise problems. Use a graphing calculator overhead to project the images. **T, O**
5. Students complete writing about concepts and capstone problems (Student Self-Assessment and Reflection). **E2**
6. For homework, have students complete problems 1 – 14 all and then have students use their graphing calculators and sketch the responses indicated in problems 15 – 21. **E1**
7. Students should complete quiz lesson 9:6

### **Lesson 7**

*General Topics:* Inverse Trigonometric Functions

1. Discuss and define inverse trigonometric functions – *arcsin, arccos, arctan, domain, range*. **E1, R**
2. Provide direct instruction and examples problems using inverse trigonometric functions. A graphing calculator should be used to show students how to obtain exact values. Use an overhead projector to display each graph and its inverse. Allow students to compare the differences in the graphs. **E1**

3. Have students work in pairs to complete problems using Geometer's Sketchpad. Discuss results as a class. Print for special needs students. **T, O**
4. Students complete writing about concepts and capstone problems (Student Self-Assessment and Reflection). **E2**
5. For homework, have students complete problems 1 – 11 odd and 23 – 35 odd. Students should also complete problems 110 and 111 to provide a real world context. **E1**
6. Students should complete quiz lesson 9:7

## ***Lesson 8***

*General Topics: Applications and Models*

1. Have students brainstorm how trigonometric functions can model real-life problems. **E1, R**
2. Have students work with a partner to complete various problems 30 – 60. Discuss the results whole class. **E1**
3. Students complete writing about concepts and capstone problems (Student Self-Assessment and Reflection). **E2**
4. For homework, have students complete additional real world problems in the areas that are interest to them. **E1**
5. Students should complete quiz lesson 9:8

## ***Lesson Review and P.S. Problem Solving***

*General Topics: Review and problem solving*

1. Students will work in pairs to complete review excises and problem solving set at the end of the unit. **E2**
2. Students should complete the Unit Test.
3. Students will work with a partner to make corrections on their unit test **E2**

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TI – Calculator applications will be integrated throughout the book

### **Content Connections**

Content Standards integrated within instructional strategies

## *Delaware Model Unit*

This unit has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model unit has undergone a rigorous peer review and jurying process to ensure alignment to selected Delaware Content Standards.

**Unit Title: Analyzing Historical Data**

**Designed by: Lisa Prueter**  
**District: Appoquinimink**

**Content Area: Social Studies**  
**Grade Level: 11**

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### **Summary of Unit**

This unit of study addresses [Delaware History Standard 2b, which asks students to differentiate between fact and interpretation](#). Students will learn that history is the interpretation of the past and that historians use facts to support their interpretations. In this unit, students will evaluate the strengths and weaknesses of various historical documents. Students will use these documents in the construction of their own interpretation of the past.

Students will conduct a case study of the 1898 American invasion of Cuba. They will analyze a variety of conflicting primary accounts, weigh the evidence, and draw their own conclusions about why the United States government took this action. Students will **consider if the United States engaged in “imperialism” and place the Spanish-American War** in the broader context of the 19<sup>th</sup>-century expansion of Western power around the world.

This unit draws heavily from the website *Historical Thinking Matters*, a site designed to help students and teachers analyze documents like historians.

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### **Charter School Unit Modification**

1. Why was this model unit of instruction selected as part of your schools' curricular submission?

This unit of instruction was selected as part of Newark Charter's curricular submission because the level of rigor displayed in the unit corresponds to the level of rigor evidenced throughout the year in this U.S History curriculum map. Also, because the students at Newark Charter High School will be undergoing coursework to increase their global awareness on their path to global competency, undergoing a process that allows the students to investigate and analyze historical data will allow them to think more in depth regarding our country's past and how this knowledge can help shape their thinking of themselves in the context of both a community citizen, and a part of a larger, global community. This will also aid the students in engaging in higher level thinking by synthesizing the information that they will receive through the instruction of this unit and their knowledge of U.S History, allowing them to identify how specifically having knowledge of the past can shape decisions made for our country's future.

2. What modifications have been made to the model unit of instruction to meet the specific needs of the student population your school serves?

There have been no modifications made to this model unit of instruction. The unit, as is, is rigorous enough to meet the needs of the students.

3. What modifications have been made to the model unit of instruction that reflect the resources (human, time, building, technology etc.) available to your school?

At Newark Charter School, there are no limits to the resources needed to fully engage and educate the students. The resources required through the course of this unit are ones that are readily available to the staff and students.

4. Describe any other modifications that have been made to the model unit of instruction that will assist in the curricular review for your school.

No other modifications were made to this model unit of instruction.

## Stage 1 – Desired Results (What students will know, do, and understand)

### Delaware Content Standards

- **History Standard Two 9-12b:** Students will examine and analyze primary and secondary sources in order to differentiate between historical facts and historical interpretations.

### Big Idea

- Historical analysis

### Unit Enduring Understandings

- Historians derive their interpretations of the past from multiple, sometimes conflicting, sources.
- Historians must prove where the information can be found that is the basis for historical conclusions.

### Unit Essential Questions

- Why does differentiating between fact and interpretation matter?
- Why is it necessary to consult multiple sources when studying the past?

### Knowledge and Skills

#### Students will know...

- History is the interpretation of the past. Historians use historical facts to construct their interpretations.

#### Students will be able to...

- Analyze primary and secondary documents in order to differentiate between fact and opinion.
- Recognize the value and limitations of historical documents.
- Analyze historical data in order to construct their own interpretation of the past.

## Stage 2 – Assessment

(Evidence that will be collected to determine whether or not Desired Results are achieved)

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### **Performance and Transfer Tasks**

This unit has two summative assessments. The first is a Performance Task that asks students the question:

- Why did the United States invade Cuba?

Students will use [Appendix 3a](#) and [Appendix 3d](#) for the Performance Task.

The second assessment is a transfer task that requires students to use knowledge and understandings to perform a task in a setting or context. Students are asked to evaluate a conflict in South Ossetia. Students will use [Appendix 5](#) for the transfer task.

For both tasks, review the scoring guide with students prior to instruction. Students should work on these tasks after Lessons 1-3 have been completed.

### **Student Self-Assessment and Reflection**

When students are required to think about their own learning, to articulate what they understand and what they still need to learn, achievement improves.

-Black and William, 1998; Sternberg, 1996; Young, 2000

How a teacher uses the information from assessments determines whether that assessment is formative or summative. Formative assessments should be used to direct learning and instruction and are not intended to be graded.

The Checks for Understanding at the end of each instructional strategy should be used as formative assessment and may be used as writing prompts or as small-group or whole-class discussion. Students should respond to feedback and be given opportunities to improve their work. The rubrics will help teachers frame that feedback.

An interactive notebook or writing log could be used to organize student work and exhibit student growth and reflection.

**Stage 3 – Learning Plan**  
(Design learning activities to align with Stage 1 and Stage 2 expectations)

**Lesson One**

**Essential Questions**

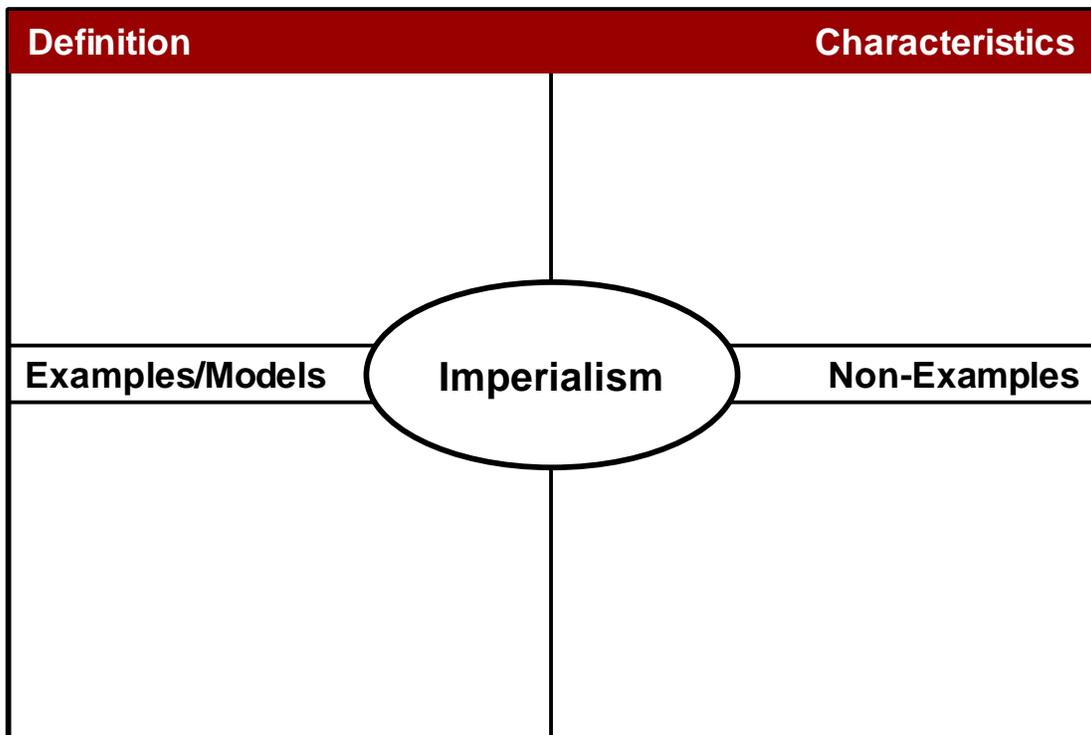
- Why does differentiating between fact and interpretation matter?
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**Instructional Strategies**

**Strategy 1: Gathering Information**  
**Frayer Model**

Have each student create a Frayer model for Imperialism: fold a piece of paper in half twice and then bend down the upper-left corner. When the paper is opened, the creases of the paper have created four rectangular quadrants and a diamond-shaped area in the center.

The teacher should create a transparency of the Frayer model to fill in during class discussion. Use a piece of paper to cover the quadrants, revealing one at a time.



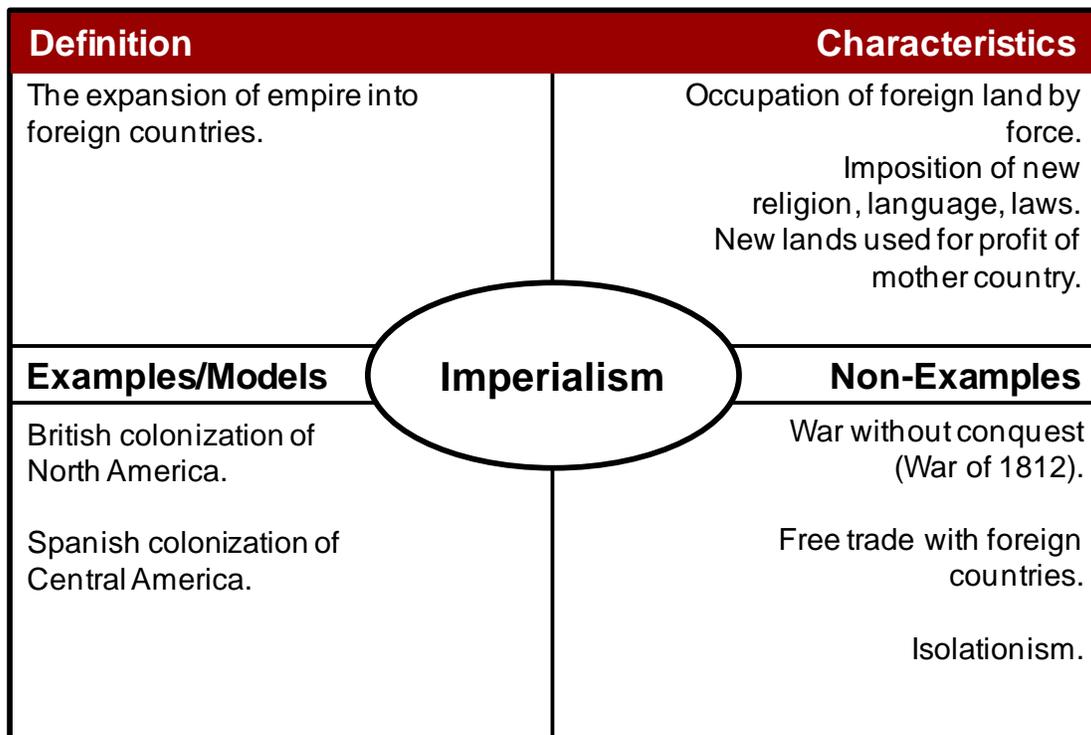
## Steps

1. Introduce the concept of this unit: imperialism.
2. Characteristics: Ask students to brainstorm characteristics of imperialism with a partner. Have them write their responses in the upper-left quadrant. Students share responses with the whole group, and teacher records responses on transparency.
3. Examples/models: Ask students to brainstorm examples of imperialism with a partner. Encourage them to remember the history they have studied. Share responses.
4. Non-examples: Ask students to brainstorm non-examples of imperialism with a partner. Encourage them to remember the history they have studied. Share responses.
5. Definition: Students create their own definition of imperialism. Ask students to share their definitions, then teacher may reveal the dictionary definition:

**"The policy of extending the rule or authority of an empire or nation over foreign countries, or of acquiring and holding colonies and dependencies."**

*Dictionary.com. Unabridged (v.1.1) Based on the Random House Dictionary, c. Random House, Inc., 2006.*

## Sample



## **Strategy 2: Gathering Information**

### **Graphic Organizers**

Have student pairs investigate the following events in U.S. history and complete the chart in [Appendix 1a](#): the Louisiana Purchase, the Monroe Doctrine, the annexation of Texas, Mexican-American War, and the purchase of Alaska. Students should consult their textbooks for factual information. Students should use their Frayer model to decide if each event is an example of imperialism.

### **Check for Understanding**

- ❖ Did the United States engage in imperialism in the 19<sup>th</sup> century?
- ❖ Why or why not? Support your answer with specific evidence from U.S. history.

### **Rubric**

2 – This response gives a valid definition of imperialism with accurate and relevant evidence from U.S. history.

1 – This response gives a valid definition of imperialism with inaccurate, irrelevant, or no historical evidence.

## **Strategy 3: Extending and Refining**

### **Classifying**

Tell students that, in this unit, they will learn why differentiating between fact and interpretation matters. We will explore the importance of this skill by studying American foreign policy in the late 19th century.

Students, alone or with a partner, read eight statements and decide if each statement is a fact or interpretation—see [Appendix 1b](#).

Ask students to share responses and reasons for their choices. Reveal the correct answers and discuss why all but one statement is an interpretation.

## Lesson Two –Using Historical Sources: Why Did the U.S. Invade Cuba?

This lesson is adapted from Historical Thinking Matters: <http://historicalthinkingmatters.org/>. All required materials are available at this website, unless otherwise indicated.

### Strategy 1: Gathering Information

Write inquiry on the board: Why did the U.S. invade Cuba?

Play a brief documentary excerpt on Spanish-American War. Clips are available from Historical Thinking Matters <http://historicalthinkingmatters.org/spanishamericanwar/> or United Streaming: *American History: Battling Beyond U.S. Borders*, segment: “The Story of the USS Maine” (3:56).

Tell students that we will watch the film twice. Before the second viewing, instruct students to take notes about information that helps to answer the question, why did the U.S. invade Cuba?

Have students generate hypotheses for the reasons that the U.S. invaded Cuba.

### Check for Understanding

- ❖ Which reason for the U.S. invasion of Cuba do you find most convincing? Explain your answer.

### Rubric

2 – This response includes a valid reason and an accurate and relevant explanation.

1 – This response includes a valid reason with an inaccurate, irrelevant, or no explanation.

### Strategy 2: Extending and Refining Guided Document Analysis

Before we return to the question of why the United States invaded Cuba, we will examine two interpretations of a specific event: the sinking of the U.S.S. Maine in Havana Harbor.

Hand out the following:

- Adapted Warm-Up Documents Analysis Chart—[Appendix 2a](#)
- Document A: *New York Journal*  
<http://historicalthinkingmatters.org/spanishamericanwar/0/inquiry/intro/>
- Document B: *New York Times*  
<http://historicalthinkingmatters.org/spanishamericanwar/0/inquiry/intro/>

Remind students that historians rely on sources to interpret past events. Often, sources provide contradictory evidence. Students, acting as historians, must be discriminating in their use of sources. The two sources they will examine today are from newspapers. These newspaper articles were written in 1898 and are **primary sources** (review the difference between primary and secondary documents, if necessary).

Have students read, silently or aloud, **Document A**. Have students complete the first three columns on the analysis chart for **Document A**.

Share answers. Repeat this procedure with **Document B**. In pairs, have students complete the last column of the chart.

**Whole Group Discussion:** Pose the following questions for discussion:

- Do you know what happened to the Maine? What are the facts of this incident?
- What evidence do you have for your answer? Give an example where the reporter uses solid evidence to support a claim made in the article.
- Compare the visual impact of the two headlines. Which newspaper would you be more likely to buy? Why? What can we infer about these two newspapers?

Front page of *The New York Times*, February 16, 1898

<http://www.nytimes.com/learning/general/onthisday/big/0215.html>

Front page of *The New York Journal*, February 17, 1898

[http://www.pbs.org/crucible/frames/\\_journalism.html](http://www.pbs.org/crucible/frames/_journalism.html)

- Do you think these articles would have been received differently by their readers in 1898? How so?
- What effect might the *Journal* article have had on its readers?
- What effect might the *Times* article have had on its readers?
- How significant do you think the Maine explosion was to the American people at this time? Why?
- Which account is more convincing? Why?

### Check for Understanding

- ❖ How does the sinking of the Maine incident demonstrate the importance of differentiating between fact and opinion? Use a specific example from the Maine incident to support your answer.

### Rubric

2 – This response provides at least one valid reason and an example that supports it.

1 – This response includes at least one valid reason but does not include a relevant example.

### Note to Teacher: Investigations into *The Maine* Explosion:

- 1898 – U.S. Naval Court inquiry concluded that a large mine blew up *The Maine*.
- 1911 – U.S. Army Corps of Engineers completely exposed the wreck and corroborated that a mine destroyed *The Maine*.
- 1976 – Admiral Hyman G. Rickover and his investigative team concluded that the explosion was caused by a spontaneous fire in a coalbunker adjacent to a powder magazine.
- 1998 – *National Geographic* commissioned a new investigation that used computer models, which produced inconclusive results. A fire in a coalbunker could have sparked the explosion, or a small mine could have penetrated the ship's hull and set off explosions (*National Geographic*, Feb. 1998, p.92-110).

### Strategy 3: Application Independent Document Analysis

Now we will return to the question, why did the United States invade Cuba in 1898?

In addition to Document A and Document B from Strategy 2, students will need:

- Adapted Main Inquiry Documents Analysis Chart—[Appendix 2b](#)
- Document C: *Awake United States!*  
<http://historicalthinkingmatters.org/spanishamericanwar/1/sources/5/fulltext/>
- Document D: President McKinley’s State of the Union Address  
<http://historicalthinkingmatters.org/spanishamericanwar/1/sources/5/fulltext/>
- Document E: Reconcentration Camps  
<http://historicalthinkingmatters.org/spanishamericanwar/1/sources/2/>
- Document F: “Prepared to Move”  
<http://historicalthinkingmatters.org/spanishamericanwar/1/sources/3/>
- Document G: Monroe Doctrine  
<http://historicalthinkingmatters.org/spanishamericanwar/1/sources/6/>
- Document I: March of the Flag  
<http://historicalthinkingmatters.org/spanishamericanwar/1/sources/7/>

In pairs or small groups, students complete the Adapted Main Inquiry Documents Analysis Chart in [Appendix 2b](#). Teachers may choose to create stations for each document and have students rotate in small groups through the stations.

**Note to Teacher:** This activity calls for analyzing Documents A and B a second time, and this time asking what these sources tell us about why the United States invaded Cuba. Teachers should model analyzing these documents before students examine documents C-I on independently.

Click here for primary documents that have been modified for easier reading  
<http://historicalthinkingmatters.org/spanishamericanwar/1/materials/worksheets/>

#### Check for Understanding

- ❖ Which document do you think is most factual? Explain your answer.

#### Rubric

- 2 – This response includes one document with an accurate and relevant explanation.
- 1 – This response includes one document with an inaccurate, irrelevant, or no explanation.

## Lesson 3 – Sources Beyond Written Documents: Political Cartoons

Explain to students that historians do not rely solely on written documents in constructing their interpretations. Historians seek out a variety of different sources in order to corroborate their interpretations of the past. We will continue to practice differentiating fact from interpretation by analyzing visual historical resources.

### Strategy 1: Gathering Information Guided Political Cartoon Analysis

Distribute, or project overhead, the political cartoon: “Well, I hardly know which to take first!”

[http://commons.wikimedia.org/wiki/File:Well,\\_I\\_hardly\\_know\\_which\\_to\\_take\\_first!\\_5-28-1898.JPG](http://commons.wikimedia.org/wiki/File:Well,_I_hardly_know_which_to_take_first!_5-28-1898.JPG)

Distribute the political cartoon analysis worksheet, [Appendix 3a](#). This worksheet has been adapted from the National Archives:

<http://www.archives.gov/education/lessons/worksheets/cartoon.html>

Guide students through the cartoon analysis. As a class, complete the last section of the Political Cartoon Gallery Walk, [Appendix 3b](#).

### Strategy 2: Extending and Refining Independent Political Cartoon Analysis

Place students in their groups from Lesson 2. Distribute the following political cartoons from the lesson, “The Birth of the American Empire as Seen through Political Cartoons (1896-1905)” by Luis Martinez-Fernandez at <http://www.oah.org/pubs/magazine/1898/martinez-lesson.pdf>

- A. *The Cuban Melodrama*
- B. *Miss Cuba Receives an Invitation*
- C. *How Some Apprehensive People Picture Uncle Sam after the War*
- D. *After the First Mile*

Additional political cartoons from this era can be found at PBS *Crucible of Empire: The Spanish-American War*: <http://www.pbs.org/crucible/frames/journalism.html>

- E. *Hurrah for the Fourth of July!*
- F. *Spanish Politeness*

Have students examine each of the political cartoons by participating in a gallery walk:

1. Students create a display of one political cartoon by pasting the cartoon on a larger piece of poster paper. In the margins around the cartoon, students add comments that explain the meaning of the cartoon.
2. Political cartoon displays are posted around the room.
3. Students move in small groups to view each display and complete the Political Cartoon Gallery Walk worksheet at [Appendix 3b](#).

## Check for Understanding

- ❖ How do political cartoonists use symbols to convey their interpretation of an event or person? Use a specific example to support your answer.

### **Rubric**

2 – This response provides at least one valid explanation with an accurate and relevant example.

1 – This response includes at least one valid explanation with an inaccurate, irrelevant, or no example.

**Note to Teacher:** Students may find creating a timeline for these documents will aid their analysis. Students should note that some documents pre-date the U.S. invasion of Cuba, while others were published several years later.

### **Strategy 3: Application**

Performance Task: Why did the United States invade Cuba?

There are two versions of the Performance Task.

- Option A, [Appendix 3c](#), asks students to create and defend their own thesis. This option is recommended for advanced students.
- Option B, [Appendix 3d](#), asks students to defend or refute a thesis from a fictional historian.

## Performance Task Scoring Rubric

Scoring Category	Score Point 3	Score Point 2	Score Point 1
<b>Thesis Statement</b>	Interpretation is stated clearly. Thesis is obvious to the audience.	Interpretation is stated but is not obvious to the audience.	Interpretation is not clear.
<b>Use of Historical Evidence</b>	Interpretation is supported by multiple pieces of historical evidence. Interpretation is highly persuasive.	Interpretation is supported by some historical evidence. Interpretation is somewhat persuasive.	Interpretation is not adequately supported by evidence and is not persuasive.
<b>Explanation of Research Process</b>	There is a thorough critique of the strengths and weaknesses of the documentary sources. There is a clear explanation of how the documents were used to construct interpretation.	There is some critique of sources. There is some explanation of how sources were used to construct the interpretation.	There is minimal critique of sources. There is minimal explanation of how documents were used to construct the interpretation.
<b>Importance of Differentiating Between Fact and Interpretation</b>	There is a well-reasoned explanation of the implications of this interpretation.	There is an explanation of the implications of this interpretation.	There is minimal explanation of the implications of this interpretation.

Above the Standard: 10-12

Meets the Standard: 7-9

Below the Standard: Less than 7

### Reflection

After students have presented their findings and listened to the conclusions of other groups, have them complete a Y-Pie reflection, [Appendix 3e](#).

## Lesson 4: Interpretations of the Expansion of Western Power

### Strategy 1: Gathering Information Expansionism Around the World

The purpose of this lesson is to place the expansion of American influence in a global context.

1. Display for students a map of the world that shows the extent of colonial possessions c. 1900-1914.

#### Maps

- <http://users.erols.com/mwhite28/afri1914.htm>
  - <http://users.erols.com/mwhite28/1907powr.htm>
  - <http://www.history.com/maps.do?type=view&catId=273&letter=l&mapId=1178>
  - [http://www.joh.cam.ac.uk/library/library\\_exhibitions/schoolresources/exploration/scramble\\_for\\_africa/](http://www.joh.cam.ac.uk/library/library_exhibitions/schoolresources/exploration/scramble_for_africa/)
  - [http://www.lib.utexas.edu/maps/historical/ward\\_1912/world\\_1910.jpg](http://www.lib.utexas.edu/maps/historical/ward_1912/world_1910.jpg)
  - <http://www.wvnorton.com/college/history/ralph/resource/impaftr.htm>
2. Introduce four explanations for 19<sup>th</sup> century imperialism:
    - a. **Economic:** The “Neo-Imperialism” of the 19<sup>th</sup> century was the result of capitalism. Colonies provided raw materials for industrial production, markets for manufactured goods, and cheap labor. **Lenin called imperialism the “monopoly stage of capitalism.”**
    - b. **Strategic:** The Great Powers (e.g., Great Britain, France, Germany, and the United States) secured colonies in order to protect their interests abroad and enhance their geo-political influence. For example, Egypt was important to the British because the Suez Canal provided the shortest route to India. Other countries scrambled to acquire their own colonies to compete with the British. Colonial adventures might also unify a nation in a common goal.
    - c. **Social Darwinism:** Herbert Spenser adapted Charles Darwin’s theory of natural selection to human social relations. **Spenser coined the phrase “survival of the fittest” to describe how “superior” peoples (the fittest) should rule the less powerful, or “inferior,” peoples.**
    - d. **Civilizing Mission:** The more “advanced” people had a duty to bring the benefits of their higher culture, including Christianity, education, industry, and modern technology.

### Strategy 2: Extending and Refining Guided Document Analysis: “White Man’s Burden”

Guide students through a careful analysis of Kipling’s “White Man’s Burden”—see Appendix 4a <http://www.fordham.edu/halsall/mod/Kipling.html>. For possible answers to discussion questions, refer to the Teacher’s Guide in Appendix 4b.

Be sure that students understand challenging vocabulary and allusions in the poem.

**Background for teachers:** Rudyard Kipling was an immensely popular and prolific British author. He was born in British India in 1865. His works include *The Jungle Book* (1894), *Captains Courageous* (1896), *Kim* (1901), and *Just So Stories for Little Children* (1902). Kipling won the Nobel Prize for Literature in 1907.

While some scholars argue that “White Man’s Burden” is satire, most believe that this poem is consistent with Kipling’s other works that celebrate the benefits of imperialism. Note that Kipling emphasizes the high cost of imperialism to colonizers; he calls imperialism a “burden.”

This poem can be seen as a welcome to the United States into the family of colonizers. The subtitle of the poem is: “The United States and the Philippines.”

Have students summarize each stanza in their own words. Discuss the following questions:

- According to Kipling, what is “The White Man’s Burden?”
- Which primary document from the Spanish American War most closely resembles this poem in its view of imperialism? Provide specific examples from the document to support your answer.

### Check for Understanding

- ❖ Which interpretation of motives for imperialism does Kipling’s “White Man’s Burden” express? Use an example from the poem to support your answer.

### Rubric

- 2 – This response identifies “civilizing mission” with an accurate and relevant example.
- 1 – This response identifies “civilizing mission” with an inaccurate, irrelevant, or no example.

**Note to Teacher:** This unit examines the reasons why the United States invaded Cuba. It is important to note, however, that there was significant resistance to overseas expansion among Americans. You may want to include in this unit a discussion of anti-imperial sentiment. A good source for anti-imperialism documents is *Liberty and American Anti-Imperialism*: <http://www.antiimperialist.com/index.html>

The site contains negative responses to the publication of Kipling’s White Man’s Burden. Particularly effective is Ernst Howard Crosby’s “The Real ‘White Man’s Burden,’” published in *The New York Times*, February 15, 1899. <http://www.antiimperialist.com/templates/Flat/img/pdf2/Crosby-RealWMB.pdf>

### **Strategy 3: Application**

#### **Independent Document Analysis**

1. In pairs or small groups, students analyze one of the following explanations of imperialism ([Appendix 4c](#)). Give each group blue, red, green, and yellow highlighters. Assign each motive a color, for example:
  - Economic motive: green
  - Strategic motive: red
  - Social Darwinism: blue
  - Civilizing Mission: yellow
2. Have students highlight with the appropriate color words and passages in the document that reflect these motives.
3. Have students summarize the argument for imperialism in one sentence.
4. Have students give brief reports on their document.

### **Strategy 4: Application**

#### **Applying an Interpretative Framework**

Give students the following facts about the U.S. occupation of the Philippines ([Appendix 4d](#)). In pairs or alone, have students write a one-paragraph summary of the event using one of the explanations of imperialism. Students should also create a title for the paragraph that clearly reflects the interpretation.

Students may select which facts they wish to include in the paragraph, but they may not alter the facts.

Have students share completed paragraphs. As a class, discuss the ways in which historical facts can be used to argue a particular interpretation of the past.

#### **Check for Understanding 1**

- ❖ Why is it necessary to consult multiple sources when studying the past? Use an example from this unit to support your answer.

#### **Rubric**

- 2 – Response includes a valid reason and relevant example.
- 1 – Response includes a valid reason and an irrelevant or no example.

#### **Check for Understanding 2**

- ❖ One of the topics that you will study next is World War One.
- ❖ Given what you have learned about historical interpretations in this unit, what do you expect to learn about the causes of World War One? Explain your answer.

#### **Rubric**

- 2 – This response includes a valid expectation and an accurate and relevant explanation.
- 1 – This response includes a valid expectation and an inaccurate, irrelevant, or no explanation.

**Appendix 1a**

<b>Event</b>	<b>Date</b>	<b>Summary</b>	<b>Was this an example of Imperialism? Explain</b>
Louisiana Purchase			
Monroe Doctrine			
Annexation of Texas			
Mexican-American War			
Purchase of Alaska			

## Appendix 1b

### *Fact or Interpretation?*

**Directions:** Decide if each of the statements is a fact or interpretation. Check the appropriate box.

<b>Statement</b>	<b>Fact</b>	<b>Interpretation</b>
1. The United States became an imperial power when it invaded Cuba in 1898.		
2. U.S. intervention in Latin America was popular with American citizens.		
3. The costs of American imperialism outweighed the benefits.		
4. Imperialism is a necessary step to becoming a world power.		
5. Imperialists were motivated by greed.		
6. American control over territory was beneficial because it brought improvements in education and transportation.		
7. Panama regained control of the Panama Canal in 1999.		
8. <b>President Theodore Roosevelt's "Big Stick" foreign policy was a success.</b>		

### *Fact or Interpretation?*

**Directions:** Decide if each of the statements is a fact or interpretation. Check the appropriate box.

#### **Answer Key**

<b>Statement</b>	<b>Fact</b>	<b>Interpretation</b>
1. The United States became an imperial power when it invaded Cuba in 1898.		X
2. U.S. intervention in Latin America was popular with American citizens.		X
3. The costs of American imperialism outweighed the benefits.		X
4. Imperialism is a necessary step to becoming a world power.		X
5. Imperialists were motivated by greed.		X
6. American control over territory was beneficial because it brought improvements in education and transportation.		X
7. Panama regained control of the Panama Canal in 1999.	X	
8. <b>President Theodore Roosevelt's "Big Stick" foreign policy was a success.</b>		X

**Appendix 2a**

*Which Interpretation Is More Convincing?*

<b>Document</b>	<b>Publication Date</b>	<b>What is this source's <i>INTERPRETATION</i> of what happened to the Maine?</b>	<b>What <i>FACTS</i> are included to support this interpretation?</b>	<b>Write a quotation that contrasts with something written in the other document.</b>
<b>A <i>Journal</i></b>				
<b>B <i>Times</i></b>				

Adapted from <http://historicalthinkingmatters.org/pdf/SpAmOrgWarmUp.pdf>

- Compare the facts used by both newspapers to support their claims about what happened to the *Maine*. Which newspaper uses stronger evidence?

**Appendix 2b**

*Why Did the United States Invade Cuba?*

<b>Document</b>	<b>Date/ Author</b>	<b>Causes Suggested by This Document</b>	<b>Facts From This Document Supporting This Interpretation</b>
<b>A <i>Journal</i></b>			
<b>B <i>Times</i></b>			
<b>C <i>Awake U.S.</i></b>			
<b>D <i>McKinley</i></b>			
<b>E <i>Camps</i></b>			

<b>Document</b>	<b>Date/ Author</b>	<b>Causes Suggested by This Document</b>	<b>Facts From This Document Supporting This Interpretation</b>
<b>F <i>Move</i></b>			
<b>G <i>Monroe</i></b>			
<b>I <i>March</i></b>			

Adapted from <http://historicalthinkingmatters.org/pdf/SpAmOrgMain.pdf>

**Appendix 3a**

***Cartoon Analysis Worksheet***

<b>Level 1</b>	
<b>Visuals</b>	<b>Words</b>
1. List the objects or people you see in the cartoon.  2. Label each object on the cartoon.	1. Identify the cartoon caption and/or title.  2. Underline words or phrases used by the cartoonist to identify people and objects in the cartoon.  3. Circle any important numbers or dates that appear in the cartoon.
<b>Level 2</b>	
<b>Visuals</b>	<b>Words</b>
3. Which of the objects on your list are symbols?  4. In the margin of the cartoon, write a brief explanation for each symbol.	4. In the margin of the cartoon, list adjectives that describe the emotions portrayed in the cartoon.
<b>Level 3</b>	
5. What is the cartoonist's <b>INTERPRETATION</b> of U.S. foreign intervention?	

Adapted from <http://archives.gov/education/lessons/worksheets/cartoon.html>

**Appendix 3b**

*Political Cartoon Gallery Walk*

<b>Title</b>	<b>FACTS included in the Cartoon</b>	<b>Cartoonist's INTERPRETATION of U.S. Foreign Policy</b>
A "The Cuban Melodrama"		
B "Miss Cuba Receives an Invitation"		
C "How Some Apprehensive People Picture Uncle Sam after the War"		
D "After the First Mile"		
E "Hurrah for the Fourth of July!"		
F "Spanish Politeness"		
G "Well, I Hardly Know which to Take First!"		

## Appendix 3c

### *Why Did the United States Invade Cuba?*

#### **Prior Knowledge**

Now that you have explored how different interpretations can be drawn from facts and learned about the historical context of the Spanish-American War, you are ready to be historians yourselves. You will examine primary and secondary sources to uncover historical evidence and construct your own interpretations of the U.S. invasion of Cuba.

#### **Problem/Role**

The President has appointed a new Secretary of State to the U.S. Department of State, the cabinet office devoted to foreign policy matters. In order to prepare for the job, the incoming Secretary has requested that historians (you!) submit reports on the reasons why the U.S. has intervened in foreign countries in the past. The Secretary has requested that your team of historians focus on the Spanish-American War.

#### **Perspective**

You are a professional historian hired by the U.S. Department of State. Because your professional reputation is important to you, you are concerned with conducting a thorough investigation into the origins of the Spanish-American War and creating a polished, persuasive presentation of your interpretation.

#### **Product**

You will present your findings in an oral presentation accompanied by **one** of the following:

1. PowerPoint;
2. Poster; or
3. Written analysis.

You should focus on finding the **ONE** most convincing reason why the U.S. invaded Cuba in 1898. This reason will be your THESIS STATEMENT. In order to be persuasive, you must clearly explain your method of investigation and how you used historical facts in the creation of your interpretation. You should identify in your presentation the documents you found most useful and those that you found unreliable and why. You must explain the implications of your interpretation (i.e., given this interpretation, did the U.S. respond correctly?)

## Appendix 3d

### *Why Did the United States Invade Cuba?*

#### **Prior Knowledge**

Now that you have explored how different interpretations can be drawn from facts and learned about the historical context of the Spanish-American War, you are ready to be historians yourselves. You will examine primary and secondary sources to defend or refute an interpretation of the U.S. invasion of Cuba.

#### **Problem/Role**

Historian X argues that the United States invaded Cuba in 1898 for solely humanitarian reasons. He believes that Americans wanted only to help Cubans who were suffering under Spanish rule. Do you agree with his conclusion?

#### **Perspective**

You are a professional historian. Because your professional reputation is important to you, you are concerned with conducting a thorough investigation into the origins of the Spanish-American War and creating a polished, persuasive presentation of your interpretation.

#### **Product**

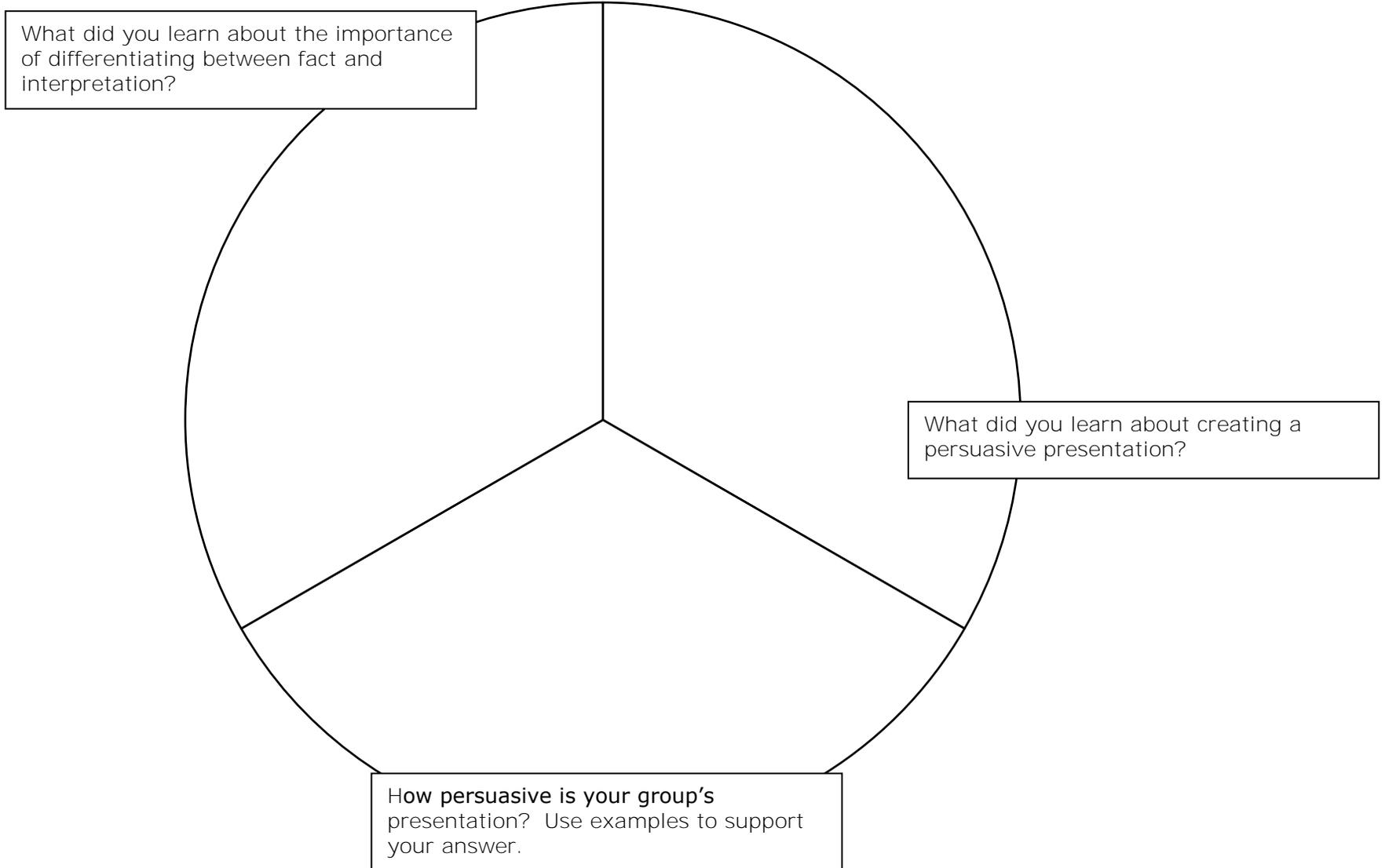
You will present your findings in an oral presentation accompanied by **one** of the following:

1. PowerPoint;
2. Poster; or
3. Written analysis.

You should clearly state if you agree or disagree with Historian X. This position will be your **Thesis Statement**. In order to be persuasive, you must clearly explain your method of investigation and how you used historical facts in the creation of your interpretation. You should identify in your presentation the documents you found most useful and those that you found unreliable and why. You should also explain why it is important for the public to know if Historian X was correct or not.

**Appendix 3e**

***Y-Pie Evaluation***



## Appendix 4a

### ***“The White Man’s Burden”***

By Rudyard Kipling  
*McClure’s Magazine*, 1899

Take up the White Man's burden--  
Send forth the best ye breed--  
Go bind your sons to exile  
To serve your captives' need;  
To wait in heavy harness,  
On fluttered folk and wild--  
Your new-caught, sullen peoples,  
Half-devil and half-child.

*How does Kipling describe colonized peoples?*

Take up the White Man's burden--  
In patience to abide,  
To veil the threat of terror  
And check the show of pride;  
By open speech and simple,  
An hundred times made plain  
To seek another's profit,  
And work another's gain.

*According to Kipling, who benefits from imperialism?*

Take up the White Man's burden--  
The savage wars of peace--  
Fill full the mouth of Famine  
And bid the sickness cease;  
And when your goal is nearest  
The end for others sought,  
Watch sloth and heathen Folly  
Bring all your hopes to nought.

*What should imperial powers strive to do in annexed lands?*

Take up the White Man's burden--  
No tawdry rule of kings,  
But toil of serf and sweeper--  
The tale of common things.  
The ports ye shall not enter,  
The roads ye shall not tread,  
Go mark them with your living,  
And mark them with your dead.

*What is "heathen folly"?*

*According to Kipling, for whom shall roads and ports be built?*

Take up the White Man's burden--  
And reap his old reward:  
The blame of those ye better,  
The hate of those ye guard--  
The cry of hosts ye humour  
(Ah, slowly!) toward the light: --  
"Why brought he us from bondage,  
Our loved Egyptian night?"

*What is "the light"?*

Take up the White Man's burden--  
Ye dare not stoop to less--  
Nor call too loud on Freedom  
To cloke your weariness;  
By all ye cry or whisper,  
By all ye leave or do,  
The silent, sullen peoples  
Shall weigh your gods and you.

*What is this quote an allusion to?*

Take up the White Man's burden--  
Have done with childish days--  
The lightly proffered laurel,  
The easy, ungrudged praise.  
Comes now, to search your manhood  
Through all the thankless years  
Cold, edged with dear-bought wisdom,  
The judgment of your peers!

*How will colonized peoples react to the efforts of imperialists?*

*What does a laurel symbolize?*

*Why should imperialists attempt to improve colonized peoples?*

## Appendix 4b – Teacher’s Guide

### **“The White Man’s Burden”**

By Rudyard Kipling  
*McClure’s Magazine*, 1899

#### **Possible Answers**

- How does Kipling describe colonized peoples?  
Colonized peoples are described as “half-devil and half-child.” They are “fluttered” and wild folk. This is consistent with the ideal of colonial paternalism, wherein colonizers are beneficent parental figures and the colonized are ignorant, powerless children.
- According to Kipling, who benefits from imperialism?  
The colonized peoples reap all the benefit. Colonizers should “seek another’s [the colonized] profit,” not their own.
- What should imperial powers strive to do in annexed lands?  
Colonizers should bring peace, end famine, and cure sickness. It was assumed that, prior to the arrival of Europeans, regions such as Africa existed in a violent state of nature.
- What is “heathen folly”?  
Heathen = pagan, non-Christian  
Folly = foolishness, stupidity, ignorance  
The foolishness of the native peoples will destroy the noble goals of colonizers.
- According to Kipling, for whom shall roads and ports be built?  
For the native, colonized peoples. Colonizers should enter foreign lands as workers (serfs and sweepers), not conquerors, there to labor for the good of others. The best sons of the mother country will dedicate their lives to bettering annexed countries, and many will die doing it.
- What is “the light”?  
Western Civilization, including Christianity, education, and western customs and values.
- What is this quote an allusion to?  
This is probably an allusion to Biblical slavery. Native peoples “enslaved” by ignorance will resist the light of civilization. They are content in their backwardness.
- How will colonized peoples react to the efforts of imperialists?  
Native peoples will scrutinize colonizers’ every action and belief. The native peoples will blame colonizers for trying to improve their lives and hate colonizers for protecting them.
- What does a laurel symbolize?  
The laurel symbolizes victory and/or accomplishment. Laurels were given to winners in the Ancient Greek Olympics. It is the root of “baccalaureate,” for university degrees. Colonization will be no easily won achievement.

- Why should imperialists attempt to improve colonized peoples?

Kipling suggests that imperialism is the duty of “civilized” nations. He links imperialism to adulthood (“have done with childish days”) and masculinity. The approval of native peoples is not important; what is important is the “judgment of your peers,” or other civilized nations.

1. According to Kipling, what is “The White Man’s Burden”?

The duty to civilize backward peoples.

2. Which primary document from the Spanish American War most closely resembles this poem in its view of imperialism? Provide specific examples from the document to support your answer.

### **Document I: March of the Flag**

“It means an opportunity for all the glorious young manhood of the republic... the most virile, ambitious, impatient, militant manhood the world has ever seen...” echoes Kipling’s reference to imperialism as an expression of manhood.

“benighted peoples will know that the voice of Liberty is speaking, at last, for them; that civilization is dawning, at last, for them – Liberty and Civilization, those children of Christ’s gospel,” echoes Kipling’s definition of the White Man’s Burden.

### *Appendix 4c – Document A*

The adventurous enthusiasm of President Theodore Roosevelt and his “manifest destiny” and “mission of civilization” party must not deceive us. **It was... Rockefeller, Pierpont Morgan...** and their associates who needed Imperialism and who fastened it upon the shoulders of the great Republic of the West. They needed Imperialism because they desired to use the public resources of their country to find profitable employment for **their capital which otherwise would be superfluous...**

American Imperialism was the natural product of economic pressure of a sudden advance of capitalism which could not find occupation at home and needed foreign markets for goods and **for investments...**

Adapted from J.A.Hobson, *Imperialism: A Study* (1902). Excerpted at <http://www.marxists.org/archive/hobson/1902/imperialism/pt1ch6.htm>

### ***Appendix 4c – Document B***

Gentlemen, these are considerations that merit the full attention of patriots. The conditions of naval warfare have greatly changed .... At present, as you know, a warship, however perfect its design, cannot carry more than two weeks' supply of coal; and a vessel without coal is a wreck on the high seas, abandoned to the first occupier. Hence the need to have places of supply, shelters, ports for defense and provisioning.... And that is why we needed Tunisia; that is why we needed Saigon and Indochina; that is why we need Madagascar... and why we shall never leave them! ... Gentlemen, in Europe such as it is today, in this competition of the many rivals we see rising up around us, some by military or naval improvements, others by the prodigious development of a constantly growing population; in a Europe, or rather in a universe thus constituted, a policy of withdrawal or abstention is simply the high road to decadence!

Adapted from Jules Ferry, *On French Colonial Expansion* (1884). Excerpted at <http://www.fordham.edu/halsall/mod/1884ferry.html>

### *Appendix 4c – Document C*

Should not the German nation, so seaworthy, so industrially **and commercially minded... successfully hew a new** path on the road of imperialism? We are convinced beyond doubt that the colonial question has become a matter of life-or death for the development of Germany. Colonies will have a salutary [healthy] effect on our economic situation as well as on our entire national progress.

Here is a solution for many of the problems that face us. In this new Reich [Empire] of ours there is so much bitterness, so much unfruitful, sour, and poisoned political wrangling, that the opening of a new, promising road of national effort will act as a kind of liberating influence. Our national spirit will be renewed, a gratifying thing, a great asset. A people that has been led to a high level of power can maintain its historical position only as long as it understands and proves itself to be the bearer of a culture mission. At the same time, this is the only way to stability and to the growth of national welfare, the necessary foundation for a lasting expansion of power.

Adapted from Friedrich Fabri, "Does Germany Need Colonies?" (1879). Excerpted at <http://web.jjay.cuny.edu/~jobrien/reference/ob44.html>

*Appendix 4c – Document D*

I contend that we are the finest race in the world and that the more of the world we inhabit the better it is for the human race. Just fancy those parts that are at present inhabited by the most despicable specimens of human beings what an alteration there would be if they were brought under Anglo-Saxon influence, look again at the extra employment a new country added to our dominions gives. I contend that every acre added to our territory means in the future birth to some more of the English race who otherwise would not be brought into existence. Added to this the absorption of the greater portion of **the world under our rule simply means the end of all wars...**

Adapted from Cecil Rhodes, "Confession of Faith" (1877). Excerpted at <http://www.uoregon.edu/~kimball/Rhodes-Confession.htm>

## Appendix 4d

### *Facts About the Philippine War*

**Directions:** Choose one of the explanations for imperialism (economic, strategic, civilizing mission, or Social Darwinism).

Use the following facts to create a one-paragraph summary of the Philippine War from the perspective of that explanation. You may choose which facts to include, but you may not alter any of the facts. Be sure to write a title that clearly conveys your interpretation.

- The United States captured the Philippine Islands from Spain in 1898.
- The United States refused to grant the Philippines independence. Filipinos resisted American rule.
- Between 1898 and 1902, the United States sent 200,000 soldiers to fight in the Philippines.
- Over 4,000 Americans and 50,000 Filipinos died in the war.
- During American rule in the Philippines, which lasted until 1946, Americans built roads, schools, bridges, and sewers.
- The Philippine economy—made up of fishing, agriculture, timber, and mining—became dependent on American markets.
- U.S. President McKinley said the following about deciding to annex the Philippine Islands:

*"(1)That we could not give them back to Spain—that would be cowardly and dishonorable; (2) that we could not turn them over to France and Germany—our commercial rivals in the Orient—that would be bad business and discreditable; (3) that we could not leave them to themselves—they were unfit for self-government—and they would soon have anarchy and misrule over there worse than Spain's was; and (4) that there was nothing left for us to do but to take them all, and to educate the Filipinos, and uplift and civilize and Christianize them, and by God's grace do the very best we could by them..."*

<http://historymatters.gmu.edu/d/5575/>

## Appendix 5

### *Transfer Task: Conflict in South Ossetia*

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#### **Document A**

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August, 14 2008

[Russia Today](#)

#### **Russia mourns victims of bloodshed in South Ossetia**

Russia held a day of mourning for those killed during the five days of fighting in South Ossetia on August 13. People from the capital Tskhinvali, which became a battlefield after **being attacked by Georgia, are recovering from a nightmare. It's hard to find a citizen who hasn't lost a relative in the conflict.**

Meanwhile, Russian peacekeepers are continuing to pull people out from the rubble of destroyed buildings.

A [vigil to remember the victims of the violence](#) was held during the night at Moscow's Cathedral of Christ the Saviour[...]

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#### **Document B**

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August 9, 2008

[The Telegraph](#) ([www.telegraph.co.uk/news/](http://www.telegraph.co.uk/news/))

#### **Georgia: Russia Enters into War in South Ossetia**

By Adrian Blomfield

Over 1,300 people are reported dead after Russian forces responded to a Georgian attack on rebels in the breakaway province of South Ossetia by mounting a full scale invasion.

GORI (The Telegraph) - Columns of Russian tanks plunged the two neighbors into war as they filed into South Ossetia, marking the Kremlin's first military assault on foreign soil since the Soviet Union's Afghanistan intervention, which ended in 1989[...]



<http://www.telegraph.co.uk/news/worldnews/europe/georgia/2525400/Georgia-Russia-enters-into-war-in-South-Ossetia.html>

### ***Transfer Task: Conflict in South Ossetia***

1. According to Document A, what happened to the people of South Ossetia?
2. According to Document B, what happened to the people of South Ossetia?
3. What facts can you determine from these two articles?
4. Why might these two accounts differ?
5. What other sources would help you to decide what really happened in South Ossetia? Explain your answer.
6. Why is differentiating between fact and interpretation important? What are the implications of believing one interpretation and not another?

### *Transfer Task Scoring Rubric*

<b>Scoring Category</b>	<b>Score Point 3</b>	<b>Score Point 2</b>	<b>Score Point 1</b>
<b>Differentiating between fact and interpretation</b> (Questions 1-3)	Student can clearly summarize both interpretations and identify common factual information.	Student has some difficulty summarizing both interpretations and identifying common factual information.	Student is not able to summarize interpretations; student is not able to identify common factual information.
<b>Analysis</b> (Question 4)	Student provides persuasive reasons why the documents might differ.	Student provides a plausible reason why these documents might differ.	Student is unable to explain why these documents might differ.
<b>Research methodology</b> (Question 5)	Student provides a thorough explanation of what other sources would be helpful to the investigation and why.	Student provides some explanation of what other sources would be helpful to the investigation and why.	Student is unable to explain what other sources would be helpful to the investigation.
<b>Importance of differentiating between fact and interpretation</b> (Question 6)	Student provides a well-reasoned explanation of the importance of differentiating fact from interpretation. Student provides a compelling explanation of the implications of believing one interpretation over another.	Student provides an explanation of the importance of differentiating fact from interpretation. Student provides a plausible explanation of the implications of believing one interpretation over another.	Student is unable to explain the importance of differentiating fact from interpretation. Student is unable to explain the implications of believing one interpretation over another.

Above the Standard: 10-12  
Meets the Standard: 7-9  
Below the Standard: Less than 7

## ***Delaware Model Lesson***

This lesson has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model lesson has undergone a rigorous peer review and juring process to ensure alignment to selected Delaware Content Standards.

**Lesson Title: Changing Interpretations of Reconstruction**

**Designed by: Lisa Prueter, Appoquinimink School District**

**Content Area: United States History**

**Grade Level: 11**

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### **Summary of Lesson**

Students will examine historians' analyses of Reconstruction. Students will identify key arguments in these analyses and place historians in a school of historical thought.

### **Charter School Unit Modification**

1. Why was this model unit of instruction selected as part of your schools' curricular submission?

This unit of instruction was selected as part of Newark Charter's curricular submission because the level of rigor displayed in the unit corresponds to the level of rigor evidenced throughout the year in this U.S History curriculum. Also, because the students at Newark Charter High School will be undergoing coursework to increase their global awareness on their path to global competency, undergoing a process that allows the students to learn about the Reconstruction through the lens of both historical researchers and 21<sup>st</sup> century students, will allow them to think more in depth regarding our country's past and how this knowledge can help shape their thinking of themselves in the context of both a community citizen, and a part of a larger, global community.

2. What modifications have been made to the model unit of instruction to meet the specific needs of the student population your school serves?

There have been no modifications made to this model unit of instruction. The unit, as is, is rigorous enough to meet the needs of the students.

3. What modifications have been made to the model unit of instruction that reflect the resources (human, time, building, technology etc.) available to your school?

At Newark Charter School, there are no limits to the resources needed to fully engage and educate the students. The resources required through the course of this unit are ones that are readily available to the staff and students.

4. Describe any other modifications that have been made to the model unit of instruction that will assist in the curricular review for your school.

No other modifications were made to this model unit of instruction.

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## Delaware Content Standards

- **History Standard Three 9-12a:** Students will compare competing historical narratives by contrasting different historians' choice of questions, use and choice of sources, perspectives, beliefs, and points of view, in order to demonstrate how these factors contribute to different interpretations.

## Essential Question

- In what ways are historical interpretations influenced by the time in which they are written and by whom they are written?

## Prior Knowledge

This lesson should be the conclusion of a unit on Reconstruction. Students should already be familiar with Presidential and Congressional Reconstruction as well as the end of Reconstruction and the rise of Redeemer Governments and codified segregation in the South.

## Materials (click to access)

- [Reconstruction Anticipation Guide](#)
- Facts about Reconstruction (A and B versions)
- PowerPoint lecture
- Textbook excerpts about the Ku Klux Klan from *History in the Making*
- Film clips from *Gone with the Wind* on YouTube: Scarlett and Melanie Protect Tara  
<http://www.youtube.com/watch?v=oqIUF55ulrU>
- And optional: *Birth of a Nation* (scene from South Carolina House of Representatives)  
[http://www.youtube.com/watch?v=R4v\\_yRFf4-Y&feature=related](http://www.youtube.com/watch?v=R4v_yRFf4-Y&feature=related)
- Textbook excerpts on Reconstruction from *History in the Making*
- Document Analysis Chart
- Summative Assessment Rubric
- Transfer Task: Historical views of Columbus

## Instructional Strategies

### Strategy One: Gathering Information Anticipation Guide

Hand out the [Reconstruction Anticipation Guide](#) and have students record their answers. Discuss as a class but do not reveal the correct answers (only #10 is a fact). Return to the Anticipation Guide at the conclusion of the lesson. Ask students if they would change any of their answers and why.

### Strategy Two: Gathering Information Summarizing

The attachment [Facts about Reconstruction](#) contains two separate lists regarding Reconstruction—one list contains positive facts while the other list contains negative facts. Distribute the positive facts list to one-half of the students and the list with negative facts to the other half. Have students use the facts listed on the handout to write a short paragraph that summarizes Reconstruction. Students should not know that two different lists were handed out. Ask a few students from both groups to read their paragraphs aloud. Students should be surprised to hear such conflicting accounts.

Use the following questions to guide class discussion:

- Which view of Reconstruction is correct?
- How might personal biases lead to one interpretation or the other?
- How might the sources used by historians lead to one interpretation or the other? Give an example of a source that would provide a positive/negative view of Reconstruction.
- How would the questions asked by historians lead to one interpretation or another?

### Strategy Three: Extending and Refining Direct Instruction

Use the accompanying [PowerPoint](#) to explain the four schools of Reconstruction Historiography: *Traditional*, *Dissenting*, *Revisionist*, and *Post-Revisionist*.

**Note:** This lecture outline is a simplified overview of how Reconstruction historiography has changed over the course of the 20<sup>th</sup> century. Teachers should supplement this lecture with additional background information and encourage students to consider what social/political/cultural conditions might have influenced historical interpretation.

### Strategy Four: Extending and Refining Document Analysis (Whole Group)

Hand out copies of Ku Klux Klan [Document A](#) and [Document B](#).<sup>1</sup> Read aloud together. For each document, lead students through guiding questions:

- How are freed blacks described in this document? Underline the adjectives used to describe them.
- How are members of the KKK described? Underline adjectives used to describe them.
- What reasons are given for the creation of the KKK?
- According to the document, what did the KKK do?
- Does the document approve or condemn the KKK? Find specific evidence in the document to support your answer.

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<sup>1</sup> Document A was published in 1916; Document B in 1996.

- Which of the four schools of Reconstruction Historiography does each document belong? Why?

### Check for Understanding

- ❖ Why might historical interpretations of an event change over time? Support your answer with an example.

### Rubric

- 2 – This response provides a valid reason with an accurate and relevant example.
- 1 – This response provides a valid reason with an inaccurate, irrelevant, or no example.

### Strategy Five: Extending and Refining Film Analysis (Whole Group)

Read students this brief synopsis of *Gone with the Wind* to prepare them for viewing a film clip.

*Gone with the Wind* is the fictional story about Scarlett O’Hara, a southern belle whose comfortable life is turned upside down by the Civil War. When we pick up with this scene, Scarlett has returned to her family’s plantation from Atlanta at the end of the war. She finds that Union troops have destroyed the estate, leaving Scarlett and her family to cope the best they can with few resources. **One day, Scarlett hears a stranger approach the house...**

Tell students that we will watch a film clip twice at the following link: <http://www.youtube.com/watch?v=eL0aPDOSu80> 4:39. On the second viewing, have students take notes on the details that reveal the film’s interpretation of the Civil War and Reconstruction.

After viewing the film clip, lead students through the guiding questions:

- Scarlett and her family represent the Old South. How are they portrayed in this scene?
- How are Northerners portrayed?
- Does it seem that Scarlett’s actions in this scene are justified? Why or why not?
- What do you think has “gone with the wind”?
- To which school of Reconstruction Historiography does this film belong? Why?

### Check for Understanding

- ❖ In mixed-ability pairs or groups of three, have students examine Reconstruction [Document C](#), [Document D](#), and [Document E](#).
- ❖ Students complete the [accompanying chart](#). Students decide which school of Reconstruction Historiography each document belongs and why.
- ❖ See attached [analysis chart and rubric](#).

### Sources

Document C: James West Davidson, et al, *Nation of Nations: A Narrative History of the American Republic, Vol. Two Since 1865* (New York: McGraw-Hill, Inc., 1994), 639-640.  
 Document D (1950): Kyle Ward, *History in the Making* (New York: The New Press, 2006), 201.  
 Document E (1995): Kyle Ward, *History in the Making* (New York: The New Press, 2006), 205.

## **Transfer Task**

[Click here](#) for transfer tasks and items to use in department exams.

## *Reconstruction – Anticipation Guide*

Decide if each of the following statements about Reconstruction is a fact or an interpretation:

	<b>Fact</b>	<b>Interpretation</b>
1. Reconstruction began in 1865.		
2. The North punished the South during Reconstruction.		
3. Yankees and blacks conspired to exploit the South after the Civil War.		
4. Racism in America doomed Reconstruction.		
5. The black legislators elected during Reconstruction were incompetent and corrupt.		
6. Carpetbaggers and Scalawags were more interested in wealth and power for themselves than in rebuilding the South.		
7. African-Americans served in Reconstruction governments with distinction.		
8. The Ku Klux Klan was a small group of renegades from the fringes of Southern society.		
9. Black and white Southerners joined together to create a more democratic society under Reconstruction.		
10. Andrew Johnson was the first American president to be impeached.		

Adapted from Historical Literacy Project  
December 2008, University of Delaware





## *Changing Interpretations of Reconstruction*

### Delaware Social Studies Standards

- History Standard 1: Chronology
- History Standard 2: Analysis
- History Standard 3: Interpretation
- History Standard 4: Content

### History Standard 3

- Grades 9-12: “Students will compare competing historical narratives by contrasting different historians’ choice of questions, use and choice of sources, perspectives, beliefs, and points of view in order to demonstrate how these factors contribute to different interpretations.

## *Changing Interpretations of Reconstruction*

*Four schools of thought*

### *Traditional*

*(first half of 20<sup>th</sup> century)*

- South accepted defeat; ready to be reintegrated into Union.
- Wise and generous policies of Lincoln and Johnson were thwarted by Radical Republicans
- An era ruined by corrupt **scalawags**, greedy **carpetbaggers**, and ignorant freedmen.
- Reconstruction ended when white southerners banded together to restore HOME RULE.

### *Traditional*

#### *Revisionist*

*(1960s)*

Reconstruction achieved successes:

- Public school systems
- Equal citizenship for black men
- Efforts to revive Southern economy

Reconstruction governments not any more corrupt than those in the North.

### *Dissenting*

#### *Revisionist*



Reconstruction was...

A dramatic change for the better.

### *Post-Revisionist*

(1970s-1980s)

- Challenged the optimism of the Civil Rights Era.
- Reconstruction was a continuation of the antebellum (pre-Civil War) South.
- Wealthy whites continued to exploit poor blacks through legal (Jim Crow Laws) and illegal (Ku Klux Klan) means.

### *Post-Revisionist*



Reconstruction was...

Not enough  
change.

*Today...*

Historians continue to re-evaluate  
Reconstruction.

## SOURCES

### Images:

- America's Library  
<http://www.americaslibrary.gov/cgi-bin/page.cgi/aa/dubois>
- Reconstruction: The Second Civil War  
[www.pbs.org/wgbh/amex/reconstruction](http://www.pbs.org/wgbh/amex/reconstruction)
- The History of Jim Crow  
<http://www.jimcrowhistory.org/scripts/jimcrow/gallery.cgi>

### Historiography:

Eric Foner, *A Short History of Reconstruction*

## Document A

### *The Ku Klux Klan – Textbook Excerpts*

In the North business went on as before; in the South the people had to face new conditions. The negroes were no longer slaves who had to work; they were free to work or not as they chose.

Most of them stayed on the farms and worked for wages. There were some, however, who wandered idly from place to place, and became a menace to the peace of the country. Soon they had no money, no food, and nobody to care for them. Some of them became vicious and even thought they could take by force what they needed.

To protect themselves against these idle and lawless negroes, who were often led away by **evil white men, a secret order known as the "Ku Klux Klan" was formed by white people of** the South. Its members met in the woods or on the outskirts of the town. They wore masks and hideous disguises and had a password and secret signs. Whenever a bad negro or white man began to give trouble a sign was nailed on his door, or a note was sent to him, ordering him to leave the community or suffer the consequences.

**The "Ku Klux" riders were a great terror to the negroes. Whenever they appeared, the** frightened blacks scurried to their cabins. The threats of this organization held the negroes in check, kept them in their house, forced the evil ones to behave, and made the idle ones work.

## Document B

The Radical Republican governments were able to remain in power in the south only so long as blacks voted for them. Some Southern whites decided to make sure that blacks did not vote. The South was now at war with itself. Southerners said that they were really fighting against their fellow southern blacks who wanted to be free and equal.

Before long, certain Old Confederates in the South had organized a secret army. Its purpose was to carry on the Civil War under another name. Although slavery was abolished by law, many Southerners still hoped to preserve as much as possible of their former life.

This secret army called itself the Ku Klux Klan – perhaps from the Greek word *kyklos*, meaning circle. Soon many branches, or circles, appeared all over the South. Klan members traveled the countryside flogging, maiming, and sometimes killing blacks who tried to vote or who in other ways presumed to be the white man's equal.... Thousands of blacks were driven from their homes, maimed, or tortured. Whole communities were terrorized by masked thugs on parade, by burning crosses, by kidnapping and tar-and-feathering.

Excerpts from Kyle Ward, *History in the Making* (New York: The New Press, 2006), 207-213.

## **Document C**

### ***Reconstruction – Textbook Excerpts***

Reconstruction failed for a number of reasons. The reforming impulse that had created the Republican Party in the 1850s had been battered and worn down by the war. The new materialism of industrial America inspired in many a jaded cynicism about the corruption of the age and a desire to forget uncomfortable issues of the past. In the South, African-American voters and leaders inevitably lacked a certain amount of education and experience; elsewhere, Republicans were divided over policies and options. Yet beyond these obstacles, the sad fact remains that the ideals of the war and Reconstruction were most clearly defeated by a deep-seated racism that permeated American life. Racism was why the white South so unrelentingly resisted Reconstruction. Racism was why most white northerners had little interest in black rights except as a means to preserve the Union or to safeguard the Republic. Racism was why northerners were willing to write off Reconstruction and with it the welfare of African-Americans. While Congress might pass a constitutional amendment abolishing slavery, it could not overturn at a stroke the social habits of two centuries.

## Document D

By the Reconstruction Act, men who only a few brief years before had labored as slaves were enabled to vote and hold office. Many of them could neither read nor write, and did not understand the workings of government. Therefore, they became easy victims of selfish white men who were known as *carpetbaggers* and *scalawags*. The carpetbaggers were Northerners who saw a chance to get rich quickly. They earned their name from the fact that they rushed to the South with their belongings hastily packed in old-fashioned traveling bags called "carpetbags." **The scalawags, on the other hand, were southern white men** who had opposed secession or who now thought that they could gain something by favoring the North. Both carpetbaggers and scalawags were more interested in wealth and power for themselves than in rebuilding the South.

## Document E

African-Americans were key, though underrepresented, members of the Republican party in the South. Determined to win their share of political power, they organized to promote the interests of their community. In 1865 the African American state convention addressed these words to the people of South Carolina:

Now that we are free men, now that we have been lifted up by the providence of God to manhood, we have resolved to come forward, and, like MEN, speak and act for ourselves.

Many southern whites criticized the presence of African Americans in Reconstruction governments. They accused African American officials of being corrupt or incompetent. In **reality, the South's African American officials appeared to have been no worse and no better** than their white counterparts. Many served with distinction. Between 1867 and 1869, approximately 1,000 men attended state constitutional conventions throughout the South. Some 265 of them were African Americans; at least 107 were former slaves. Many were veterans of the Union army, ministers, artisans, farmers, and teachers.

***Reconstruction Documents  
Analysis Chart***

<b>Document</b>	<b>According to this document, Reconstruction was...</b>  (circle one)	<b><u>Two</u> examples from the document that support your conclusion.</b>
<b>C</b>	<p>A dramatic change for the worse (traditional)</p> <p>A dramatic change for the better (revisionist)</p> <p>Not enough change (post-revisionist)</p>	<p>1.</p> <p>2.</p>
<b>D</b>	<p>A dramatic change for the worse (traditional)</p> <p>A dramatic change for the better (revisionist)</p> <p>Not enough change (post-revisionist)</p>	<p>1.</p> <p>2.</p>
<b>E</b>	<p>A dramatic change for the worse (traditional)</p> <p>A dramatic change for the better (revisionist)</p> <p>Not enough change (post-revisionist)</p>	<p>1.</p> <p>2.</p>









## *Delaware Model Unit Gallery Template*

This unit has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model unit has undergone a rigorous peer review and jurying process to ensure alignment to selected Delaware Content Standards.

**Unit Title: Historical Research**

**Designed by: Melissa Buchanan**

**District: Smyrna School District**

**Content Area: Social Studies**

**Grade Levels: 9–12**

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### **Summary of Unit**

By completing a National History Day (NHD) project, students are exposed to research skills that need to be learned and used to guide the historical research. Secondly, the students are exposed to a new way of thinking about the world and sources around them. They are taking the knowledge that they learned at the 6–8 level and are applying it in a new way. Instead of questioning a source or document, **the student learns to question a historian's *use*** of the sources in creating history.

Students continue to master a deeper understanding of the use of documents and artifacts and how historians use them to conduct research and to draw conclusions. The individual questions a researcher asks become part of an overall strategy of research—the problem of where and how to find the answers. Teachers should ask students to develop research strategies, given a particular historical problem, and examine the difficulties inherent in some research. Sources have to exist to be researched; dialogue between two historical figures cannot be replayed without someone present recording what was said.

When this standard is fully mastered, a student is ready to apply it in his/her daily adult life as a citizen by critically examining the documentary evidence put forth to support a point of view or assertion. In addition, a citizen needs to ask questions of the person who advocates a particular position. Where did they get their information? What factors influenced their point of view? How much is based on facts and how much is based upon interpretation? An understanding of the role of documentary support behind an assertion is essential for future citizenship.

Historical sources can be used to see where a historian strays from his/her sources and injects an interpretation not based upon the sources. By this point, students clearly understand primary and secondary sources and how to critically examine them. Now the standard adds the idea that sources can be used in many ways, some of which, while not strictly dishonest, are clearly opinioned conclusions, rather than facts based upon documents. A historian can stray from the sources and interject an interpretation not based upon the sources. At the prior cluster, 6–8, students learned that a researcher needs to be skeptical of every document. Now students learn that, while reading what a historian writes, we must be skeptical of his or her ***use*** of the sources. When does the historian base their argument solidly upon sources, and when does the historian express an interpretation based upon their overall research on that topic? One must not be so critical of historians at this point. Sometimes interpretation is the only way to fill in a period or description of **something for which there are no documents. But, a person reading the historian's account** must be aware that it is interpretation.

## Charter School Unit Modification

1. Why was this model unit of instruction selected as part of your schools' curricular submission?

This unit of instruction was selected as part of Newark Charter's curricular submission because the level of rigor displayed in the unit corresponds to the level of rigor evidenced throughout the year in this U.S History curriculum map. Also, because the students at Newark Charter High School will be undergoing coursework to increase their global awareness on their path to global competency, undergoing a process that allows the students to dive into historical research will allow them to think more in depth regarding our country's past and how this knowledge can help shape their thinking of themselves in the context of both a community citizen, and a part of a larger, global community.

2. What modifications have been made to the model unit of instruction to meet the specific needs of the student population your school serves?

There have been no modifications made to this model unit of instruction. The unit, as is, is rigorous enough to meet the needs of the students.

3. What modifications have been made to the model unit of instruction that reflect the resources (human, time, building, technology etc.) available to your school?

At Newark Charter School, there are no limits to the resources needed to fully engage and educate the students. The resources required through the course of this unit are ones that are readily available to the staff and students.

4. Describe any other modifications that have been made to the model unit of instruction that will assist in the curricular review for your school.

No other modifications were made to this model unit of instruction.

## Stage 1 – Desired Results (What students will know, do, and understand)

### Delaware Content Standards

**History Standard Two 9-12a:** Students will develop and implement effective research strategies for investigating a given historical topic.

**History Standard Two 9-12b:** Students will examine and analyze primary and secondary sources in order to differentiate between historical facts and historical interpretations.

### Big Ideas

- Interpretation
- Investigation

### Unit Enduring Understandings

**Students will understand that...**

- Every citizen must critically examine points of view for how the author uses his or her sources.
- Historians insert interpretations when there is a lack of resources.
- **Critical investigation demands constant reassessment of one's research strategies.**

**Unit Essential Questions**

- What is the evidence for this argument? Is that *all* the evidence, or just what the author wanted me to read?
- Does differentiating between fact and interpretation matter?
- What causes an individual to impact history?
- Where and how should I research my topic?

**Knowledge and Skills****Students will know...**

- Interpretation
- Analysis of points of view
- Use and choice of sources
- Historical context of individuals

**Students will be able to...**

- Analyze, access, manage, integrate, evaluate, and create information in a variety of forms and media
- Understand, manage, and create effective oral, written, or multimedia communication
- Locate appropriate resources
- Analyze the use of sources that form ones opinion

## Stage 2 – Assessment Evidence

(Evidence that will be collected to determine whether or not Desired Results are achieved)

### Suggested Performance/Transfer Task(s)

- Performance/transfer tasks as evidence of student proficiency.

An effective assessment for ALL students should be designed to include:

- Complex, real-world, authentic applications
- Assessment(s) for student understanding of the Stage 1 elements (Enduring Understandings, Essential Questions, Big Ideas) found in the Content Standards
- Demonstration of high-level thinking with one or more facets of understanding (e.g., explain, interpret, apply, empathize, have perspective, self-knowledge)

### Essential Questions Addressed by Transfer Task

- What is the evidence for this argument? Is that *all* the evidence, or just what the author wanted me to read?
- Where and how should I research my topic?

### Prior Knowledge

Now that you have learned how to research a topic for National History Day and have examined how historians can influence their work, you are ready to complete a National History Day Project.

### Problem

Now that you have selected and narrowed your thesis and created a research plan, you are ready to find credible, reliable sources to use for your research. You need to prove where you found these sources and why you chose them for your research, keeping in mind the **author's intent for the sources**.

### Role/Perspective

You are a researcher that is working on a National History Day project. Your goal is to create a written record that will show the depth and quality of your research and highlight your conclusions.

### Product

Submit a process paper and annotated bibliography for your National History Day project.

- A **process paper** is a description of no more than 500 words explaining how you conducted your research and created and developed your entry. You must conclude your description with an explanation of the relationship of your topic to the contest theme.
- An **annotated bibliography** is required for all categories. It should contain all sources that provided usable information or new perspectives in preparing your entry. You will look at many more sources than you actually use. You should list only those sources that contributed to the development of your entry. Sources of visual materials and oral interview must be included. The annotations for each source must explain how the source was used and how it helped you understand your topic.

**Teacher Tip:** Resources are available through the National History Day website:

- Annotated Bibliography: <http://www.nhd.org/AnnotatedBibliography.htm>
- Process Paper: <http://www.nhd.org/ProcessPapers.htm>

### Criteria for an Exemplary Response

Be sure to include these items in your process paper:

- A title page is required as the first page of written material in every category. Your title page must include only the title of your entry, your name(s), and the contest division and category in which you are entered. Do not include your age, grade, or school name.
- **First Section** should explain how you chose your topic.
- **Second Section** should explain how you conducted your research.
- **Third Section** should explain how you selected your presentation category and created your project.
- **Fourth Section** should explain how your project relates to the NHD theme.
- **Fifth Section** should explain how you determined what was fact and what was interpretation in the sources that you used.

Be sure to remember this about your annotated bibliography:

- An annotation normally should be 1 to 3 sentences long.
- The annotations must explain how the source was used and how it helped you understand your topic. Do not recount what the source said.

### Rubrics

- Scoring guide to evaluate performance/transfer tasks used as evidence of student proficiency.

An effective scoring guide should:

- Measure what is appropriate for the Content Standard that is assessed.
- Provide opportunities for differentiation of the performance/transfer tasks used as evidence of student proficiency.

### Transfer Task Rubric

Scoring Category	Score Point 3	Score Point 2	Score Point 1
<b>Process paper explains how your topic was chosen</b>	The explanation is <b>well developed</b>	The explanation is <b>partially developed</b>	The explanation is <b>minimally developed</b>
<b>Process paper explains how you conducted your research</b>	The explanation is <b>well developed</b> and reflects an effective research strategy	The explanation is <b>partially developed</b> and/or reflects a somewhat effective research strategy	The explanation is <b>minimally developed</b> and/or reflects an ineffective research strategy
<b>Process paper explains how you selected your presentation category and how the project was created</b>	The explanation is <b>well developed</b>	The explanation is <b>partially developed</b>	The explanation is <b>minimally developed</b>

Scoring Category	Score Point 3	Score Point 2	Score Point 1
<b>Process paper explains how the project related to the NHD theme</b>	The explanation exhibits a <b>clear</b> linkage between the chosen topic and the NHD theme	The explanation exhibits a <b>limited</b> linkage between the chosen topic and the NHD theme	The explanation <b>does not</b> exhibit a clear linkage between the chosen topic and the NHD theme
<b>Process paper explains how you determined between fact and interpretation</b>	The explanation is <b>clearly developed</b> and shows a <b>strong</b> understanding of fact and interpretation	The explanation is <b>minimally developed</b> and shows a <b>limited</b> understanding of fact and interpretation	The explanation is <b>not developed</b> and shows <b>no</b> understanding of fact and interpretation
<b>The annotated bibliography explains how each source was used and how it helped develop their understanding of the topic</b>	The bibliography shows a <b>clear connection</b> between the sources and the theme and the explanation <b>clearly</b> shows how the source was used	The bibliography shows a <b>limited connection</b> between the sources and the theme and the explanation shows <b>limitedly</b> how the source was used	The bibliography shows <b>no connection</b> between the sources and the theme and the explanation <b>does not</b> show how the source was used

**Total Score:** \_\_\_\_\_

**Above the Standard: 16 to 18**  
**Meets the Standard: 11 to 15**  
**Below the Standard: 6 to 10**

### Other Evidence

- Varied evidence that checks for understanding (e.g., tests, quizzes, prompts, student work samples, observations, and supplements the evidence provided by the task).
- Formative assessment is embedded into the lessons through the Checks for Understanding.

### Student Self-Assessment and Reflection

- Opportunities for self-monitoring learning (e.g., reflection journals, learning logs, pre- and post-tests, self-editing—based on ongoing formative assessments).

When students are required to think about their own learning, to articulate what they understand and what they still need to learn, achievement improves.

– Black and William, 1998; Sternberg, 1996; Young, 2000.

How a teacher uses the information from assessments determines whether that assessment is formative or summative. Formative assessments should be used to direct learning and instruction and are not intended to be graded.

The Checks for Understanding at the end of each instructional strategy should be used as formative assessment and may be used as writing prompts or as small-group or whole-class discussion. Students should respond to feedback and be given opportunities to improve their work. The rubrics will help teachers frame that feedback.

An interactive notebook or writing log could be used to organize student work and exhibit student growth and reflection.

## Stage 3 – Learning Plan (Design learning activities to align with Stage 1 and Stage 2 expectations)

### Key Learning Events Needed to Achieve Unit Goals

- Instructional activities and learning experiences needed to align with Stage 1 and Stage 2 expectations.

Include these instructional elements when designing an effective and engaging learning plan for ALL students:

- Align with expectations of Stage 1 and Stage 2
- Scaffold in order to acquire information, construct meaning, and practice transfer of understanding
- Include a wide range of research-based, effective, and engaging strategies
- Differentiate and personalize content, process, and product for diverse learners
- Provide ongoing opportunities for self-monitoring and self-evaluation

## Lesson 1: Individuals in History

### Background

National History Day projects ask students to explore a central theme by creating a research project on a topic of their own choosing. This year's theme is "The Individual in History: Actions and Legacies." This theme was chosen not so students could report biographies of famous individuals but to go beyond and explore people who cared deeply about a cause and, in doing so, actually "nudged history forward." The selected individual does not necessarily have to be "famous," but could be someone who impacted history in his or her own way—for example, a soldier in a war, a woman who participated in the woman's rights movement, or a student who stood in opposition to an idea. The important thing for students to recognize is the characteristics that all of these people share and the changes that they made to their own society and to history.

### Essential Question

- What causes an individual to impact history?

### Strategy 1: Gathering Information Think-Pair-Share

Warm-Up Journal Question: What makes someone important to history? What characteristics should they possess?

Have the students share with their partners the characteristics they think that someone should possess to make them important. Have them add to or modify **each other's lists**. Then have them determine together what makes someone important to history.

Post a Timeline of major historical American events on the board or overhead. See attached **Handout #1**. Break students into groups of 3–4 and assign each group an event on the timeline. Then using their textbooks, Internet, or other classroom resources, have them identify 4–5 people in their event that they believe to be the most important.

Have them add the names of the people that they chose underneath the posted timeline. Then have them justify their picks to the class. **Pose the questions:**

- Why are these people the most important?
- What makes them the most important?
- Were there other people that you had to leave off because you could only pick 4?
- What criteria did you use to pick the people?

### Check for Understanding

**Have students choose one of the people from their time period or from one of their classmates' time periods. Then answer this question:**

✓ **Why is the person you chose the most important of all of the people listed? Explain your answer.**

**Rubric**

2 – This response gives a valid reason with an accurate and relevant explanation.

1 – This response gives a valid reason with an inaccurate, irrelevant, or no explanation.

For administration of formative assessment see **Student Self-Assessment and Reflection.**

**Strategy 2: Extending and Refining  
Carousel Jigsaw**

Break the students into groups of 4–5 people. Give each group a different color marker to use throughout the activity. Around the classroom, post the following statements (either on large sheets of paper or on smaller pieces of paper taped to desks around the room).

1. Individuals can change history by themselves.
2. The time and place in which a person lives affects their role in history.
3. The only people that changed history are the ones who are famous.
4. A person is a product of the events and the people that came before them.
5. People impact history because they are associated with a just cause.
6. Individuals who impact history all have similar characteristics.

The students will first travel around the room, and each group will decide whether they agree or disagree with the statement and then write their answer under the statement.

The second time around the room, students will justify their answer with a statement. Why do they agree or disagree? They should construct a clarifying statement or provide examples to help explain.

The third time around the room students **should read everyone else's answers and discuss** in their groups whether they agree or disagree with what their classmates posted.

After students have traveled around the room the last time, have the groups consider all the posted answers and respond to the following questions:

- What makes an individual important to history?
- What roles do individuals play in history?
- What impacts a person's legacy in history?

**Check for Understanding**

✓ **How will you determine if an individual has impacted history? Explain your answer.**

**Rubric**

2 – This response gives a valid reason with an accurate and relevant explanation.

1 – This response gives a valid reason with an inaccurate, irrelevant, or no explanation.

For administration of formative assessment see **Student Self-Assessment and Reflection.**

### Strategy 3: Application Categorizing

Provide the following internet sites, perhaps using a TrackStar link (<http://trackstar.4teachers.org/trackstar>):

- Al Capone: <http://www.biography.com/search/article.do?id=9237536>
- Susan B. Anthony: <http://www.biography.com/search/article.do?id=9186331>
- Andrew Carnegie: <http://www.biography.com/search/article.do?id=9238756>
- Jackie Robinson: <http://www.biography.com/search/article.do?id=9460813>
- J. Robert Oppenheimer: <http://www.biography.com/search/article.do?id=9429168>
- Jacob Riis: <http://www.biography.com/search/article.do?id=40211>
- Ray Kroc: <http://www.biography.com/search/article.do?id=9369349>
- Eleanor Roosevelt: <http://www.biography.com/search/article.do?id=9463366>

Or, provide the students hardcopies of the biographies (**Handout #2**) and have the students rank the biographies in order of importance, with number 1 being the most important and number 8 being the least important. Each student should explain the reason for their decision.

Once the students have ranked the people have them explain their thinking.

- What criteria did you use to rank the individuals?
- What made your number 1 person your first choice?
- Why would your classmates have different lists that you did? What does that suggest about history and the way that it is written?

#### Check for Understanding

- ✓ **What makes an individual “nudge history forward”? Support your answer with an example of a person whom you believe has done this.**

#### Rubric

2 – This response gives a valid reason with an accurate and relevant explanation.

1 – This response gives a valid reason with an inaccurate, irrelevant, or no explanation.

For administration of formative assessment see **Student Self-Assessment and Reflection**.

## Lesson 2: Selecting a Topic and Developing a Thesis

### Essential Question

- Where and how should I research my selected topic? (Creating a research strategy.)

### Strategy 1: Gathering Information

#### K-I-C

Have students complete the K-I-C strategy so they will start thinking about what topics they find interesting and what they might want to research. An example is found on [Handout #3](#). Have the students complete the worksheet by filling out the different sections of the chart.

Once students have an idea as to what areas they find interesting, have them move onto [Handout #4, "Finding a Topic."](#) This handout asks students to explore different topics within their theme. For example, if a student likes studying about the Civil Rights Movement, he or she could find potential topics within that content area. It will also help students narrow down what they could prove about their topic.

#### Check for Understanding:

- ✓ **How will you match your topic to the NHD theme? Explain your answer.**

#### Rubric

- 2 – This response gives a valid method with an accurate and relevant explanation.
- 1 – This response gives a valid method with an inaccurate, irrelevant, or no explanation.

- ✓ **Why do you think your individual has changed history? Explain your answer.**

#### Rubric

- 2 – This response gives a valid reason with an accurate and relevant explanation.
- 1 – This response gives a valid reason with an inaccurate, irrelevant, or no explanation.

For administration of formative assessment see [Student Self-Assessment and Reflection](#).

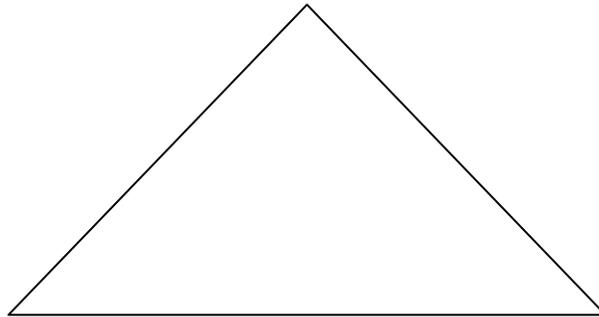
### Strategy 2: Extending and Refining Graphic Organizer

Tim Hoogland from the National History Day article "Creating Context and Focus When Studying Individuals in History" says, "Students will come to their project with a surface knowledge of their person, which means they need some time to build a foundation of information before they can make good decisions about narrowing their topics. For example, a student may know a considerable amount about Martin Luther King but the same student knows they cannot do a thorough job of analyzing his life in a 2,500 word research paper."

Students should individually prioritize the important events that shaped the life of their selected individual. Then, each student should write a short 2–3 paragraph summary about the person using the events. Eventually, one of these elements can become a focus of the research. The students should explain how the person *impacted and changed* history.

After prioritizing, each student selects one event that is the most important in impacting their individual and writes the event in the center of a triangle graphic organizer. The

student should write the responses to each of the questions below at the points of the triangle.



- What made the individual stand out at that moment?
- How did the individual impact the people around them?
- How did the context (time and place of the event) affect the individual?

### **Check for Understanding Timed-Pair Paraphrase**

**Pair students together. Direct one of the students to explain orally his or her responses to the three questions of the Triangle Organizer while the partner listens.**

**Set a timer for 3 minutes and remind the pairs that only the student sharing can talk during this time. After the timer expires, the teacher will ask the listening student to relate what the other has said. "The paraphrase might start, 'I heard you say...'"**

**Ask students to share with the whole class what their partners said. Reverse the process.**

**Have individual students consider, with his or her partner, and respond to the following reflective questions:**

- ✓ **Did you explain how the selected individual impacted and changed history?**
- ✓ **Should you change your topic at this point? Explain your answer.**
- ✓ **How do you know that your topic matches the theme? (Individuals who cared deeply about a cause and nudged history forward.) Explain your answer.**

### **Rubric**

2 – This response gives a valid reason with an accurate and relevant explanation.

1 – This response gives a valid reason with an inaccurate, irrelevant, or no explanation.

For administration of formative assessment see **Student Self-Assessment and Reflection**.

### **Strategy 3: Application Planning for Research**

Now that each student has a firmer grasp of his or her topic and has focused on how their person has impacted and changed history, they are ready to now create a research plan for their topic. How will they prove their thesis with their research?

Have them complete **Handout #5**. This will help them to create a plan as to where they will find their information.

### **Check for Understanding**

- ✓ **What problem(s) might you encounter with your research? Explain your answer.**

#### ***Rubric***

- 2 – This response gives a valid reason with an accurate and relevant explanation.
- 1 – This response gives a valid reason with an inaccurate, irrelevant, or no explanation.

- ✓ **How would you like to present your information? Why would that be the best way?**

#### ***Rubric***

- 2 – This response gives a valid reason with an accurate and relevant explanation.
- 1 – This response gives a valid reason with an inaccurate, irrelevant, or no explanation.

For administration of formative assessment see **Student Self-Assessment and Reflection**.

## Lesson 3: Differentiating Between Fact and Interpretation

This lesson draws upon History Standard Two for grades 9-12. The Clarifications document states:

When this standard is fully mastered, a student is ready to apply it in his/her daily adult life as a citizen by critically examining the documentary evidence put forth to support a point of view or assertion. In addition, a citizen needs to ask questions of the person who advocates a particular position. Where did they get their information? What factors influenced their point of view? How much is based on facts and how much is based upon interpretation? An understanding of the role of documentary support behind an assertion is essential for future citizenship.

Before students are able to master this level of the standard, they should have a very good understanding of the 6–8 benchmark of this standard. Remediation of this can be found in the NHD unit for grades 6–8 in Lesson 3. See link below:

[http://www.doe.k12.de.us/infosuites/staff/ci/content\\_areas/files/National%20History%20Day%20DMUG%20-%20Summer%202008.doc](http://www.doe.k12.de.us/infosuites/staff/ci/content_areas/files/National%20History%20Day%20DMUG%20-%20Summer%202008.doc)

### Essential Questions

- What is the evidence for this argument? Is that *all* the evidence or just what the author wanted me to read?
- Does differentiating between fact and interpretation matter?

### Strategy 1: Gathering Information

#### Think/Pair/Share

Think: What is a fact? How can you tell something is a fact?

Pair: What is an interpretation of facts? Why would historians interpret facts?

Share: Their answers with the class as to why someone would interpret facts.

Some possible answers might include:

1. A person may not have written proof and must guess as to why things happened—like CSI or courtroom dramas.
2. A person is using facts to support their opinion.

What are the characteristics of your generation? (*Refer to the list of 21<sup>st</sup> century skills*)

- **21st Century Learning** – the ability to use skills, resources, and tools to meet the demands of the global community and tomorrow’s workplace. (1) Inquire, think critically, and gain knowledge, (2) Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge, (3) Share knowledge and participate ethically and productively as members of our democratic society, (4) Pursue personal and aesthetic growth. (AASL, 2007)

### Check for Understanding

**Have the students generate a list of qualities they believe that their generation possesses. These will be the “facts” used to analyze the article in the next strategy.**

**Examples might include:**

- ✓ **Computer savvy**
- ✓ **Fast at completing tasks**
- ✓ **Environmentally conscious**

✓ **Multi-taskers (listen to music and do work)**

**Strategy 2: Extending and Refining  
Three-Minute Pause**

Have students read this article on youth in America ([Handout #6](#)):

<http://www.cbsnews.com/stories/2007/11/08/60minutes/printable3475200.shtml>

A video feed is also available.

Have students create a T-Chart to help organize their information. While reading, have the students underline the characteristics of their generation as presented in the article. Have them circle what they believe to be the author's use of interpretation of the facts.

- What sources did the author use for information?
- Where did the author inject interpretations of the facts?
- How could you tell that it was the author's opinion and not a straight reporting of the facts?

The three-minute pause can help students assess their current understanding and then clarify where they are having difficulties. This strategy is used while students are reading, listening during direct instruction, or working with media.

At an appropriate time, ask students to take a three-minute pause and turn to their partner. They will:

- Each summarize what was learned by reading the article using the three questions listed above;
- Explain to each other what they found particularly interesting or surprising;
- Each determine what was personally confusing and consult with one another for determining the meaning of the article.

**Check for Understanding**

- ✓ **Imagine that a friend had emailed the URL for this article on the Internet.**
- ✓ **Write a post to the author on the CBS website explaining why you believe the article relied upon interpretation of the facts rather than the facts themselves. Explain your answer with an example from the article.**

**Rubric**

2 – This response gives a valid reason with an accurate and relevant explanation.

1 – This response gives a valid reason with an inaccurate, irrelevant, or no explanation.

For administration of formative assessment see [Student Self-Assessment and Reflection](#).

**Strategy 3: Extending and Refining  
Jigsaw**

Students will have a harder time with this exercise when it is put into a historical context. The following website has four short articles where David McCullough presents his opinions on Theodore Roosevelt's health, his life in the west, his love of the limelight, and his worldview. <http://www.pbs.org/wgbh/amex/tr/interviews.html>

Although the articles are based on facts about Roosevelt, McCullough does insert his opinion.

Give each student one of the four articles in order to complete a chart like the one found in [Handout #7](#). Have each student find specific facts listed in the article. If necessary to

review what a fact is, have students refer back to the Think/Pair/Share strategy in Strategy 1.

Have students break into groups with the same articles in order to **determine how and why McCullough interpreted facts.**

Finally, break the students into new groups of 4 (each student with a different article) in order to answer the following questions:

- For what reasons did McCullough use interpretation when writing about Roosevelt?
- Why was it necessary for him to do so?
- Did his interpretations jeopardize the truth in the articles? Why or why not?

### Check for Understanding

- ✓ **Why might a historian think it is important to interpret historical sources? Explain your answer.**

#### **Rubric**

2 – This response gives a valid reason with an accurate and relevant explanation.

1 – This response gives a valid reason with an inaccurate, irrelevant, or no explanation.

For administration of formative assessment see **Student Self-Assessment and Reflection.**

### **Strategy 4: Application—Recognizing Interpretation in Research Setting Criteria**

Have the students work in small groups of 3–4 to create a list of criteria to use when evaluating historical articles.

Pose this question to each group of students: What questions should you ask about historical sources before they are used in research?

For example:

1. What sources did the historian use?
2. How did he or she use them?
3. Where did the historian insert interpretation into the article?
4. Should I use this article in my research? Is the author using his or her sources appropriately?

Once groups generate a list of 4 or 5 criteria, have each group select their best question to present to the class. Compile a master list of questions to be posted in the classroom and referenced while the students are researching.

### Check for Understanding

- ✓ **Why is it important to distinguish between fact and interpretation when researching? Explain your answer.**

#### **Rubric**

2 – This response gives a valid reason with an accurate and relevant explanation.

1 – This response gives a valid reason with an inaccurate, irrelevant, or no explanation.

For administration of formative assessment see **Student Self-Assessment and Reflection.**

## Note to Teacher:

At this point the students are ready to begin their research. Refer to Lesson 4 in the grade 6–8 Historical Research unit to review the importance of avoiding plagiarism.

[http://www.doe.k12.de.us/infosuites/staff/ci/content\\_areas/files/National%20History%20Day%20DMUG%20-%20Summer%202008.doc](http://www.doe.k12.de.us/infosuites/staff/ci/content_areas/files/National%20History%20Day%20DMUG%20-%20Summer%202008.doc)

This will help to create stronger research and projects.

## Resources and Teaching Tips

- A variety of resources are included (texts, print, media, web links).
- Help in identifying and correcting student misunderstandings and weaknesses.

## Resources

### **National History Day Unit Grades 6-8**

[http://www.doe.state.de.us/programs/ci/content\\_areas/files/DRC%20National%20History%20Day%20Unit%20-%206-8.pdf](http://www.doe.state.de.us/programs/ci/content_areas/files/DRC%20National%20History%20Day%20Unit%20-%206-8.pdf)

Students will benefit from an individual copy of the NHD Contest Rule Book. They may be purchased inexpensively (about 25¢ each). Contact Ellen Rendle, Delaware State History Day coordinator, at [erendle@dehistory.org](mailto:erendle@dehistory.org). The *Rule Book* is also available online in PDF format.

### **National History Day Internet Resources**

- Smithsonian Institution, National Postal Museum
- American Memory, Library of Congress <http://memory.loc.gov/ammem/>. Differentiating Sources [http://memory.loc.gov/ammem/ndlpedu/start/prim\\_sources.html](http://memory.loc.gov/ammem/ndlpedu/start/prim_sources.html).
- MLA documentation style for Internet sources [http://www.mla.org/publications/style/style\\_faq/style\\_faq4](http://www.mla.org/publications/style/style_faq/style_faq4)
- Lesson to help students gain skills necessary for researching by locating credible and original sources, determining if the sources are primary or secondary, ascertaining the qualifications and reputation of the author/speaker, and identifying the setting/circumstance of the source [http://www.pbs.org/opb/historydetectives/classroom/class\\_sources.html](http://www.pbs.org/opb/historydetectives/classroom/class_sources.html)
- Finding Primary Sources in Library Research <http://www.lib.berkeley.edu/TeachingLib/Guides/PrimarySources.html>
- National Archives <http://www.archives.gov/>. Specific site for teachers and students completing a History Day project <http://www.archives.gov/education/history-day/index.html>
- National History Day <http://www.nationalhistoryday.org/>
- Delaware History Day <http://www.hsd.org/histday.htm>
- Using primary sources on the Web <http://www.lib.washington.edu/subject/history/RUSA/>
- Researching History Day topics and differentiating between types of sources <http://www.lib.washington.edu/subject/history/historyday/his.html>

### **NHD Recommended Digital Archives Databases**

- OAIster (Open Archives Initiative) developed by the University of Michigan and the University of Illinois at Urbana-Champaign contains approximately 15 million records <http://www.oaister.org>

- The Collaborative Digitization Programs in the United States based at Middle Tennessee State University links to projects in 41 states  
<http://www.mtsu.edu/~kmiddlet/stateportals.html>
- The Greater Philadelphia region PACSCL <http://www.PhillyResearch.net/>

### **Using Historic Places to Help Research Individuals**

- The National Park Service – Teaching with Historic Places  
<http://www.nps.gov/history/NR/twhp/>
- National Register of Historic Places Database (the actual register nominations can be accessed using this website)  
<http://nrhp.focus.nps.gov/natreghome.do?searchtype=natreghome>
- National Register Travel Itineraries <http://www.nps.gov/history/nr/travel/index.htm>

### **Delaware Libraries and Museums**

#### **Hagley Museum and Library**

P.O. Box 3630  
Wilmington, DE 19807-0630  
(302) 658-2400 - [www.hagley.lib.de.us/](http://www.hagley.lib.de.us/)

Contains original manuscripts, rare books and pamphlets, and items that document the History of American Business and Technology. Also, holds information on the DuPont Company and the du Pont family.

#### **Delaware Agricultural Museum and Village**

866 N. Dupont Highway  
Dover, DE 19901  
(302) 734-1618 - [DAMV@dol.net](mailto:DAMV@dol.net)

#### **University of Delaware Library**

181 South College Avenue  
Newark, DE 19717-5267  
(302) 831-2965 - <http://www.lib.udel.edu>

In addition to its collection of books, the library holds U.S. Government documents, periodicals, and newspapers on microfilm. Special Collections contain rare manuscripts, archival collections, graphic materials, ephemera, maps, and selected bibliographies. It also contains a collection of English, Irish, and American literature.

#### **Wesley College Library**

120 North State Street  
Dover, DE 19901  
(302) 736-2413 - [www.wesley.edu](http://www.wesley.edu)

Contains a large collection of books and subscribes to 400 print periodical titles and maintains a pamphlet file.

#### **Delaware State University Library**

1200 N. DuPont Highway  
Dover, DE 19901-2277  
(302) 739-2777 - [www.dsc.edu/library](http://www.dsc.edu/library)

In addition to its book collection, the library holds annual reports and a Delaware Collection.

### **Delaware Public Archives**

121 Duke of York St.  
Dover, DE 19901  
(302) 739- 5318 - [www.state.de.us./sos/dpa](http://www.state.de.us./sos/dpa)

The official repository for documents generated by all state and local government offices. The archives collection holds birth and death records, genealogical findings, Civil War records, etc.

### **Historical Society of Delaware Library**

505 Market Street  
Wilmington, DE 19801  
(302) 655-7161 - [www.hsd.org](http://www.hsd.org)

The Historical Society collects all aspects of the history of Delaware and its people. The collections include newspapers, maps, manuscripts and photographs, serials, and pamphlets.

### **Winterthur**

Winterthur Museum, Garden, and Library  
Winterthur, DE 19735  
(800) 448-3883 - [www.winterthur.org](http://www.winterthur.org)

Contains American Art and Historical Resources. The library's (like the museum's) specialty is early American decorative arts, pre-1815.

**Delaware museums administered by the State Division of Historical and Cultural Affairs** may be located online at <http://history.delaware.gov/>. It is best to call to make an appointment and let the staff know ahead of time what you are trying to research.

## **Differentiation**

- Stage 2 and 3 allow students to demonstrate understanding with choices, options, and/or variety in the products and performances without compromising the expectations of the Content Standards.
- Instruction is varied to address differences in readiness, interest, and/or learning profiles.
- Accommodations and differentiation strategies are incorporated in the design of Stage 2 and 3.

Differentiation is embedded within the teaching strategies. Additional ideas include: in Lesson 1, students can have two colors of markers, and then identify the major players in **one color** and **"less important" people in another color**. Ask the students to justify their distinctions. What makes someone more important than another?

## **Design Principles for Unit Development**

*At least one of the design principles below is embedded within unit design.*

- **8th Grade Technology Literacy** - the ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information to improve learning in all subject areas and to acquire lifelong knowledge and skills in the 21st Century (SETDA, 2003).
- **International Education** - the ability to appreciate the richness of our own cultural heritage and that of other cultures in to provide cross-cultural communicative competence.
- **Differentiated instruction** - the ability to effectively and efficiently reach all students in a heterogeneous environment.
- **Universal Design for Learning** - the ability to provide multiple means of representation, expression and engagement to give learners various ways to acquire and demonstrate knowledge.

- **21st Century Learning** – the ability of to use skills, resources, and tools to meet the demands of the **global community and tomorrow’s workplace. (1) Inquire, think** critically, and gain knowledge, (2) Draw conclusions make informed decisions, apply knowledge to new situations, and create new knowledge, (3) Share knowledge and participate ethically and productively as members of our democratic society, (4) Pursue personal and aesthetic growth. (AASL, 2007)

***This unit addresses 21<sup>st</sup> century learning:***

- Analyze, access, manage, integrate, evaluate, and create information in a variety of forms and media
- Understand, manage, and create effective oral, written, or multimedia communication
- Frame, analyze, and solve problems
- Locate appropriate resources

**Technology Integration**

The ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information

Each lesson includes websites associated with the strategies. Student use of computers for some strategies is encouraged.

**Content Connections**

Content Standards integrated within instructional strategies

**History Standard One 9-12a:** Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.

Depending on the topic selection students will develop a better understanding of historical content to support History Standard Four.

**History Standard Four (9-12a):** Students will develop an understanding of modern United States history, its connections to both Delaware and world history, including:

- Civil War and Reconstruction (1850-1877)
- Development of an industrialized nation (1870-1900)
- Emergence of modern America (1890-1930)
- Great Depression and World War II (1929-1945)
- Postwar United States (1945-early 1970s)
- Contemporary United States (1968-present)

**History Standard Four (9-12b):** Students will develop an understanding of recent and modern world history and its connections to United States history, including:

- Intensified hemispheric interactions (1000-1500 AD)
- Explorations, contact, and interactions across the world (1450-1770)
- Revolutions, ideologies, and technological change (1750-1914)
- The 20th Century world (1900-present)

## *American History Timeline Handout #1*

Add 4-5 people that you believe to be important to the time period that you were assigned. Make sure to take notes as to why your group thinks they are important.

- CIVIL WAR
- INDUSTRIALIZATION
- PROGRESSIVISM
- GREAT DEPRESSION
- WORLD WAR II
- COLD WAR/1950s
- VIETNAM/1960s

Notes on the importance of your important people:

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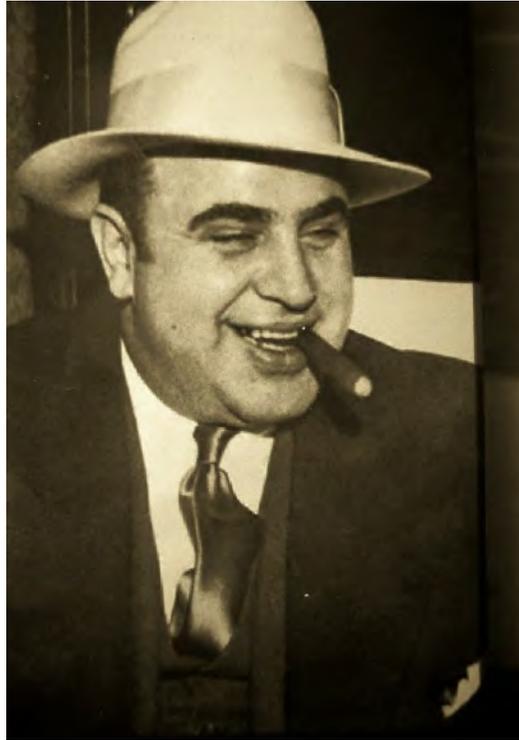
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*Biographies  
Handout #2*

*AL CAPONE 1899–1947*



Gangster, born in Brooklyn, New York, USA. He became the leader in Chicago bootlegging, gambling, and prostitution during the Prohibition Era. His involvement in gang and liquor wars left hundreds of people dead in Chicago and its suburbs. Increasingly implicated in the corruption of political, law enforcement, and labour officials, he was convicted of income-tax evasion (1931) and sentenced to 11 years' imprisonment. He was released in 1939 on grounds of ill health; he was infected with syphilis and his mental condition was deteriorating. After release, Al Capone's health continued to deteriorate. He died on January 25, 1947, of cardiac arrest at the age of 48.

Al Capone: <http://www.biography.com/search/article.do?id=9237536>

## ***SUSAN B. ANTHONY 1820–1906***



Women's rights activist, social reformer, editor, and writer. Born on February 15, 1820, in Adams, Massachusetts. For most of her life, Susan B. **Anthony fought for women's rights, especially the right to vote.** Her family followed the Quaker religion and held many strong social and political beliefs. They were supporters of the abolitionist and temperance movements.

Early in her career, Susan B. Anthony worked as a schoolteacher. But she **left education to continue her family's tradition of activism.** Anthony became involved in the antislavery and temperance movements. But as a woman she encountered many obstacles, including being denied the right to speak at a temperance conference in 1852 because of her gender. It was while she was in this movement that she met Elizabeth Cady Stanton, a social reformer. **The two women became friends and allies in the fight for women's rights, especially the right to vote.**

**Not only did Susan B. Anthony speak out on women's issues, she established a weekly newspaper to promote awareness and provide information on women's suffrage called *Revolution*, beginning in 1868.** The next year she and Stanton founded the National Woman Suffrage Association (NWSA). In 1872, Anthony made the news by trying to vote the presidential election. When she tried to cast a ballot, she was arrested. Anthony hoped that she would be able to fight for the right to vote in court, but she was unsuccessful. She was eventually just fined for her revolutionary act.

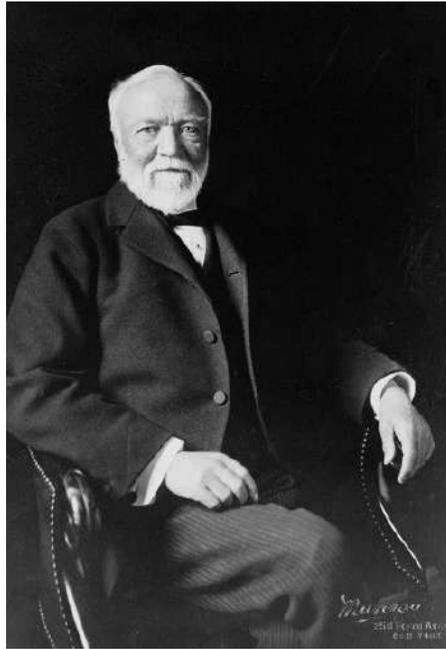
Not one to be deterred, Susan B. **Anthony continued to fight for women's suffrage.** Besides giving speeches and lectures, she worked with Stanton to record the history of the suffrage movement. This resulted in the

multivolume set called History of Woman Suffrage. The first volume was published in 1881. Anthony and Stanton worked on the next two volumes, and Anthony edited the fourth volume with assistance from Ida Husted Harper. **The final two volumes were produced after Anthony's death.**

Susan B. Anthony died on March 13, 1906. All of her hard work paid off in 1920 when the U.S. Constitution was amended to give women the right to vote, which is known as the 19th Amendment. To this day, Anthony is remembered as one of the greatest activists on behalf of women.

Susan B. Anthony: <http://www.biography.com/search/article.do?id=9186331>

## ***ANDREW CARNEGIE 1835–1919***



Industrialist and philanthropist. Born on November 25, 1835, in Dunfermline, Fife, Scotland. Although he had little formal education, he grew up in a family that believed in the importance of books and learning. The son of a handloom weaver, Carnegie grew up to become one of the wealthiest businessmen in America.

In 1853, he took a job at the Pennsylvania Railroad. He worked as the assistant and telegrapher to Thomas Scott, one of the railroad's top officials. Through this experience, he learned a lot about the railroad industry and about business in general. While working for the railroad, Carnegie begins making investments. He made many wise choices and found that his investments, especially those in oil, brought in substantial returns. He left the railroad in 1865 to focus on his other business interests, including the Keystone Bridge Company.

By the next decade, most of Carnegie's time was dedicated to the steel industry. His business, which became known as the Carnegie Steel Company, revolutionized steel production in the United States. Carnegie built plants around the country, using technology and methods that made manufacturing steel easier, faster, and more productive. For every step of the process, he owned exactly what he needed: the raw materials, ships, and railroads for transporting the goods, and even coal fields to fuel the steel furnaces. This start-to-finish strategy helped Carnegie become the dominant force in the industry and an exceedingly wealthy man. By 1889, Carnegie Steel Corporation was the largest of its kind in the world.

Some felt that the company's success came at the expense of its workers. The most notable case of this came in 1892. When the company tried to lower wages at a Carnegie Steel plant in Homestead, Pennsylvania, the employees objected. They refused to work, starting what has been called the Homestead Strike of 1892. The conflict between the workers and local managers turned violent after the managers called in guards to break up the union. While Carnegie was away at the time of strike, he was still held accountable for his managers' actions by many.

In 1901, Carnegie made a dramatic change in his life. He sold his business to the United States Steel Corporation, started by legendary financier J. P. Morgan. The sale earned him more than \$200 million. At the age of 65, Carnegie decided to spend the rest of his days helping others. While he had begun his philanthropic work years earlier by building libraries and making donations, Carnegie expanded his efforts in 1900s.

Andrew Carnegie: <http://www.biography.com/search/article.do?id=9238756>

## *Jackie Robinson 1919–1972*



Baseball player, civil rights activist. Born Jack Roosevelt Robinson on January 31, 1919, in Cairo, Georgia. Breaking the color barrier, **Jackie Robinson** became the first African American to play in baseball's major leagues. The youngest of five children, Robinson was raised in relative poverty by a single mother. He attended John Muir High School and Pasadena Junior College, where he was an excellent athlete and played four sports: football, basketball, track, and baseball. He was named the region's Most Valuable Player in baseball in 1938.

During World War II, Robinson served as a second lieutenant in the United States Army from 1942 to 1944. However, he never saw combat due to an altercation during boot camp in Texas. Robinson was arrested and court-martialed after refusing to move to the back of a segregated bus during training. He was later acquitted of the charges and received an honorable discharge. His courage and moral objection to segregation were a precursor to the impact Robinson would have in the major leagues.

After his discharge from the Army in 1944, Robinson played baseball professionally in the Negro Leagues. (At the time, the sport was segregated, and African Americans and whites played in separate leagues.) Robinson, however, was chosen by Branch Rickey, a vice president with the Brooklyn Dodgers, to help integrate major league baseball. He joined the Montreal Royals, a farm team for the Brooklyn Dodgers, in 1945. He moved to Florida in 1946 to begin spring training with the Royals with his first game on March 17, 1946.

Rickey knew there would be difficult times ahead for the young athlete and made Robinson promise to not fight back when confronted with racism, but rather to remain cool and composed. From the beginning of his career with

the Dodgers, Robinson's will was tested. Even some of his new teammates objected to having an African American on their team. People in the crowds sometimes jeered at Robinson, and he and his family received threats.

Despite the racial abuse, particularly at away games, Robinson had an outstanding start with the Royals, leading the International League with a .349 batting average and .985 fielding percentage. His excellent year led to a promotion to the Dodgers, with his debut game on April 15, 1947, marking the first time an African American athlete played in the major leagues.

Jackie Robinson: <http://www.biography.com/search/article.do?id=9460813>

## ***J. ROBERT OPPENHEIMER 1904–1967***



U.S. theoretical physicist. He graduated from Harvard University, did research at Cambridge University, and earned a doctorate from Göttingen University. He returned to the U.S. to teach at the California Institute of Technology (1929–1947). His research focused on energy processes of subatomic particles, and he trained a generation of American physicists. In World War II he was named director of the army's atomic-bomb project, later known as the Manhattan Project, and set up the laboratory in Los Alamos, N.M., that remains a principal weapons-research laboratory. He directed the Institute for Advanced Study in Princeton (1947–1966). He strongly opposed the development of the hydrogen bomb, and in 1953 he was suspended from secret nuclear research as an alleged communist sympathizer and a security risk; the case, which pitted him against [Edward Teller](#), became a worldwide cause célèbre. In 1963, he was reinstated and awarded the Enrico Fermi Award.

J. Robert Oppenheimer: <http://www.biography.com/search/article.do?id=9429168>

***JACOB RIIS 1849–1914***



U.S. journalist and social reformer. He immigrated to the U.S. at 21 and became a police reporter for the *New York Tribune* (1877–1888) and the *New York Evening Sun* (1888–1899). He publicized the deplorable living conditions in the slums of New York's Lower East Side, photographing the rooms and hallways of tenements. He compiled his findings in *How the Other Half Lives* (1890), a book that stirred the nation's conscience and spurred the state's first significant legislation to improve tenements.

Jacob Riis: <http://www.biography.com/search/article.do?id=40211>

## ***ELEANOR ROOSEVELT 1884–1962***



First lady, writer, and humanitarian. Born on October 11, 1884, in New York City, New York. The niece of President Theodore Roosevelt, Eleanor was known as a shy child and experienced tremendous loss at a young age. Her mother died in 1892. Two years later, Eleanor became an orphan at the age of 10 with the death of her father. She was sent to school in England as a teenager, an experience that helped draw her out of her shell.

In 1905, she married her distant cousin, Franklin Delano Roosevelt. For Eleanor, the early years of her marriage were filled with family activities. The couple had six children: Anna, James, Franklin (who died as an infant), Elliott, Franklin Jr., and John. She did not let her growing family prevent her from helping others. During World War I, she became active in public service, working for the American Red Cross.

After her husband suffered a polio attack in 1921, Eleanor stepped forward to help Franklin with his political career. When her husband became president in 1933, Eleanor dramatically changed the role of the first lady. Not content to stay in the background and handle domestic matters, she showed the world that the first lady was an important part of American politics. Eleanor gave press conferences and even had her own newspaper column entitled *My Day*. Eleanor spoke out for human rights, women's issues, and children's causes. She also wanted to help the country's poor and stood against racial discrimination.

During World War II, Eleanor supported the war effort and traveled abroad to visit U.S. troops. After her husband's death in 1945, she was selected to be a delegate to the United Nations General Assembly, serving from 1945 to 1953. She also became the chair of the UN's Human Rights Commission. As

a part of this commission, she helped to write the Universal Declaration of Human Rights.

Eleanor died of cancer on November 7, 1962. A revolutionary first lady, she was one of the most outspoken women to ever live in the White House. While she had her share of critics, most could agree that she was a great humanitarian who dedicated much of her life to fighting for what she thought was right.

Eleanor Roosevelt: <http://www.biography.com/search/article.do?id=9463366>

## ***RAY KROC 1902–1984***



U.S. restaurateur, a pioneer of the fast-food industry. He was working as a blender salesman when he discovered a restaurant in San Bernardino, Calif., owned by Maurice and Richard McDonald, who used an assembly-line format to prepare and sell a large volume of hamburgers, French fries, and milk shakes. Beginning in 1955, Kroc opened his first McDonald's drive-in restaurant in Des Plaines, Ill., paying the brothers a percentage of the receipts. He soon began selling franchises for new restaurants, and he instituted a training program for owner-managers that emphasized automation and standardization. At the time of his death there were some 7,500 McDonald's restaurants worldwide; with more than 25,000 restaurants in the early 21st century, McDonald's was the world's largest food-service retailer.

Ray Kroc: <http://www.biography.com/search/article.do?id=9369349>

***K-I-C***  
***WORKSHEET #3***

<b>What do I know?</b>	<b>What interests me?</b>	<b>What choices do I have?</b>
		<ul style="list-style-type: none"><li>▪ Who might I like to work with?</li> <li>▪ What might I like to explore in the content?</li> <li>▪ How might I like to show what I learned?</li></ul>

***FINDING A TOPIC AND DEVELOPING A THESIS  
HANDOUT #4***

1. Using the textbook, list at least **five** topics (time periods, people, events, etc.) that you find interesting and list the **pages** where you can find the information.
  - a.
  - b.
  - c.
  - d.
  - e.
  
2. Try and narrow the information down to something specific within two of those topics. Read the information about those two topics and use the following space to take notes on each.

<b>Topic One:</b>	<b>Topic Two:</b>

3. What could you PROVE about each of those topics? (Think about: effects, important factors, comparisons, etc)
  
4. Once you have determined what will be proven, write a thesis for your topic.

***DEVELOPING A RESEARCH STRATEGY  
HANDOUT #5***

**TOPIC:** \_\_\_\_\_

**THESIS:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**HISTORICAL CONTEXT OF YOUR TOPIC:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**SUBQUESTION #1: (What questions need to be asked to answer your thesis?)**

\_\_\_\_\_  
\_\_\_\_\_

**WHERE YOU WILL FIND THE ANSWER:**  
(what type of source, where?)

**HOW WILL YOU REPRESENT THIS IN YOUR PRESENTATION?**

**SUBQUESTION #2: (What questions need to be asked to answer your thesis?)**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**WHERE YOU WILL FIND THE ANSWER: (what type of source, where?)**

**HOW WILL YOU REPRESENT THIS IN YOUR PRESENTATION?**

## ***THE MILLENNIALS ARE COMING HANDOUT #6***

### **THE MILLENNIALS ARE COMING**

**May 25, 2007**

<http://www.cbsnews.com/stories/2007/11/08/60minutes/printable3475200.shtml>

**(CBS)** *This story was originally broadcast on Nov. 11, 2007. It was updated on May 23, 2008.*

It's graduation time and once again we say "Stand back all bosses!" A new breed of American worker is about to attack everything you hold sacred: from giving orders, to your starched white shirt and tie. They are called, among other things, "millennials." There are about 80 million of them, born between 1980 and 1995, and they're rapidly taking over from the baby boomers who are now pushing 60.

They were raised by doting parents who told them they are special, played in little leagues with no winners or losers, or all winners. They are laden with trophies just for participating and they think your business-as-usual ethic is for the birds. And if you persist in the belief you can, take your job and shove it.

As **correspondent Morley Safer** first reported last November, corporate America is so unnerved by all this that companies like Merrill Lynch, Ernst & Young, and scores of others are hiring consultants to teach them how to deal with this generation that only takes "yes" for an answer.

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The workplace has become a psychological battlefield and the millennials have the upper hand, because they are tech savvy, with every gadget imaginable almost becoming an extension of their bodies. They multitask, talk, walk, listen and type, and text. And their priorities are simple: they come first.

Just ask Marian Salzman, an ad agency executive who has been managing and tracking millennials since they entered the workforce.

"Some of them are the greatest generation. They're more hardworking. They have these tools to get things done," she explains. "They are enormously clever and resourceful. Some of the others are absolutely incorrigible. It's their way or the highway. The rest of us are old, redundant, should be retired. How dare we come in, anyone over 30. Not only can't be trusted, can't be counted upon to be, sort of, coherent."

Salzman says today's manager must be half shrink and half diplomat.

What are some of the do's and don'ts in speaking to the generation of young workers?

"You do have to speak to them a little bit like a therapist on television might speak to a patient," Salzman says, laughing. "You can't be harsh. You cannot tell them you're disappointed in them. You can't really ask them to live and breathe the company. Because they're living and breathing themselves and that keeps them very busy."

Faced with new employees who want to roll into work with their iPods and flip flops around noon, but still be CEO by Friday, companies are realizing that the era of the buttoned down exec happy to have a job is as dead as the three-Martini lunch.

"These young people will tell you what time their yoga class is and the day's work will be organized around the fact that they have this commitment. So you actually envy them. How wonderful it is to be young and have your priorities so clear. Flipside of it is how awful it is to be managing the extension, sort of, of the teenage babysitting pool," Salzman tells Safer.

All of which has led, as you'd expect, to a whole new industry—or epidemic—of consultants, experts they allege, in how to motivate, train and, yes, sometimes nanny the extraterrestrials who've taken over the workplace.

Mary Crane, who once whipped up soufflés for the White House, now offers crash courses for millennials in, well, the obvious. "As to the tattoos just make sure they stay covered up within the office, especially if you are going to be meeting clients," she advises her clients.

"It's a perfect storm we have created to put these people in a position where they suddenly have to perform as professionals and **haven't been trained," Crane says.**

Basic training, like how to eat with a knife and fork, or indeed how to work. Today, fewer and fewer middle class kids hold summer jobs because mowing lawns does not get you into Harvard.

"They have climbed Mount Everest. They've been down to Machu Picchu to help excavate it. But they've never punched a time clock. They have no idea what it's like to actually be in an office at nine o'clock, with people handing them work," Crane says.

She maintains that while this generation has extraordinary technical skills, childhoods filled with trophies and adulation didn't prepare them for the cold realities of work.

"You now have a generation coming into the workplace that has grown up with the expectation that they will automatically win, and they'll always be rewarded, even for just showing up," Crane says.

"To what extent are you having to tell the boomers, the bosses, the 50 to 60 year olds, 'The people who got to change are you guys, not them?'" Safer asks.

"The boomers do need to hear the message, that they're gonna have to start focusing more on coaching rather than bossing. If this generation in particular, you just tell them, 'You got to do this. You got to do this. You got to do this.' They truly will walk. And every major law firm, every major company knows, this is the future," Crane explains.

It's a future of sweet talking bosses, no more "Pay your dues just like I did." If this generation knows anything, it's that there are more jobs than young people to fill them.

"I believe that they actually think of themselves like merchandise on eBay. 'If you don't want me, Mr. Employer, I'll go sell myself down the street. I'll probably get more money. I'll definitely get a better experience. And by the way, they'll adore me. You only like me,'" Salzman says.

So who's to blame for the narcissistic praise hounds now taking over the office?

Wall Street Journal columnist Jeffrey Zaslow covers trends in the workplace and points the **finger at the man who once was America's favorite** next door neighbor: Mister Rogers.

"You have got a guy like Mister Rogers, Fred Rogers on TV. He was telling his preschoolers, 'You're special. You're special.' And he meant well. But we, as parents, ran with it. And we said, 'You, Junior, are special, and you're special and you're special and you're special.' And for doing what? We didn't really explain that," Zaslow says.

"But isn't this generation, particularly of middle class kids, really quite special? Aren't they, in some ways, much better than your generation, certainly mine," Safer remarks.

"Well, except, when we were younger, you had a piano teacher who expected you to practice your piano and work hard at it, and the parents expected it. And now, the parents say, 'Have fun, learn the piano, practice a little bit.' So, there's not the expectations that they will achieve and work hard," Zaslow says. "It's not the same work ethic."

Zaslow says that the coddling virus continues to eat away even when junior goes off to college. "I heard from several professors who said, a student will come up after class and say, 'I don't like my grade, and my mom wants to talk to you, here's the phone,'" he says. "And the students think it's like a service. 'I deserve an A because I'm paying for it. What are you giving me a C for?'"

Today more than half of college seniors move home after graduation. It's a safety net, or safety diaper, that allows many kids to quickly opt out of a job they don't like.

"There once was, if not shame, a little certain uneasiness about being seen to be living at home in your mid 20s, yes?" Safer asks Mary Crane.

"Not only is there no shame with it, but this is thought to be a very smart, wise, economic decision," Crane says.

**And dear old mom isn't just your landlord; she is your agent as well.** "Career services departments are complaining about the parents who are coming to update their child's resume. And in fact, you go to employers, and they're starting to express concern now with the parents who will phone HR, saying, 'But my little Susie or little Johnny didn't get the performance evaluation that I think they deserve,'" Crane says.

"Our parents really took from us that opportunity to fall down on our face and learn how to stand up," says Jason Dorsey.

Dorsey and Ryan Healy both make a living advising their fellow 20 some-things on how to cope with work. Healy started a Web site for that purpose and Dorsey has written two how-to books for them. And while Dorsey admits his mother picked out his suit for his interview with **60 Minutes**, his generation is not going to make the same mistakes their parents made.

"We're not going to settle. Because we saw our parents settle," Dorsey says. "And we have options. That we can keep hopping jobs. No longer is it bad to have four jobs on your resume in a year. Whereas for our parents or even Gen X, that was terrible. But that's the new reality for us. And we're going to keep adapting and switching and trying new things until we figure out what it is."

And figuring it out takes time. Sociologists tell us most Americans believe adulthood begins at 26 or older and that having witnessed so many sacrifices by their parents to achieve middle class security has had a huge impact. Family and friends are the new priorities, while blind careerism is beginning to fade.

"We definitely put lifestyle and friends above work. No question about it," Dorsey tells.

Both Dorsey and Healy feel that that's pretty much the way one should look at life.

"I remember my dad getting laid off and all these things growing up. And that's 'cause they sacrificed for the company. Well, the first knee jerk reaction from me is I sure don't want to do that. I'm going to be in it for me and I'm going to make it work," Dorsey says.

"Where does this fantasy about 'I'm going to find the dream job'—there's no such thing as a dream job. I mean, a few of us like me happen to have it. But where does this fantasy come from?" Safer asks Dorsey.

"I think we were told when we were little, 'You can be anything you want.' And then they went on and on and told us this," he replies.

"Big lie, right?" Safer asks.

"Big goals are great. Selling a fantasy that everything's going to be perfect and peachy is not," Dorsey says.

"I also think from, when you're in your early 20s and you're really not responsible to a family of kids, this is the time to find the best job, the best career. You know, what you really want to do," Healy adds.

And more and more businesses are responding, offering free food, fun and flexibility to keep their employees happy.

Online shoe retailer Zappos.com has found that the best way of keeping employees is giving them what they want. Actual work actually happens, despite goofy parades, snoozing in the nap room, and plenty of happy hours.

Motivational consultant Bob Nelson says companies like Zappos will avoid a looming demographic crisis. "It's harder to get people. There's gonna be fewer of them to get. And if you want to keep them and get the best out of them, you sure better know what presses their buttons," he explains.

Nelson, known in the trade as the "guru of thank you," believes that the teeniest rewards pay big dividends, regardless of age. And boss-abuse gets even bigger dividends.

"I've worked with managers that have, if we make this goal, they'll shave their head type thing," Nelson says, laughing. "Or they'll be in the dunk tank at the summer picnic. When a senior manager's willing to do that is, it says we're all in it together."

All that togetherness comes together every year at the Motivation Show in Chicago—with acre upon acre of coaches, consultants, knickknacks and fancy stuff—rewards for a job well done, and reminders to work harder.

"You think this would help motivate people to work harder?" Safer asks a masseuse.

"Oh it does," the masseuse says.

But for sure, there is an almost evangelical fervor about this work philosophy—no stick, all carrots. And believe it or not, all this prodding, praising, peddling, cajoling and psychobabble is worth \$50 billion a year in business. Ain't America great?

Where else you find free back rubs for the deserving worker bee. **What's wrong with a happy workplace and taking your time to grow up?**

"Could this be that everything is being delayed so that adolescence ends at 30 say and middle age starts at 60 say?" Safer asks Jeffrey Zaslow.

"You can hope that's the case. But, while we're having this delayed adolescence, are we getting behind as an economy and as a workforce, because we're just all playing computer games at work while we wait to grow up?" he replies.

For all the complaining, Dorsey and Healy believe their generation will transform the office into a much more efficient, flexible and yes, nicer place to be. But until then, a message to bosses everywhere: **just don't forget the praise.**

"We want to hear it and truly we'd love for our parents to know. There's nothing better than Mom getting that letter saying, 'You know, Ryan did a great job. Yeah, I just wanted to let you know you raised a fantastic son,'" Dorsey says.

"Send it to grandma, too," Healy adds, laughing.

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***FACT VS. INTERPRETATION  
HANDOUT #7***

<p><b>Facts in the article</b> On your own</p>	<p><b>Interpretations</b> With your group</p>
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**In your new group discuss the following questions using information from all of the articles.**

1. How were you able to tell when he was using his own interpretations?
2. For what reasons did McCullough use interpretation when writing about Teddy Roosevelt?
3. Did his opinions jeopardize the truth in the articles? Explain.

# Electromagnetic Waves

## Grade 9

Written by Debbie Gilchrist, Innovative Schools

### Standards:

**Standard 3:** Energy and Its Effects

**Strand 1:** The Forms and Sources of Energy

**Substrand A:** Electromagnetic waves carry a single form of energy called electromagnetic (radiant) energy.

### Goals: In the Investigations and Activities of this unit, students will be able to...

- Explain terms used to describe electromagnetic wave characteristics.
- Distinguish between different types of electromagnetic waves.
- Discuss selective absorption of waves found on the electromagnetic spectrum

### Main Ideas: The important concepts and skills covered in the Investigations and Activities of this unit are...

- Electromagnetic energy is carried by electromagnetic waves.
- There are similarities and differences shared by all electromagnetic waves.
- Selective absorption affects an electromagnetic wave as it travels through different sections of the Electromagnetic Spectrum.

**Essential Question:** How does selective absorption affect an electromagnetic wave as it travels through different sections of the Electromagnetic Spectrum? (The selective absorption of a particular material occurs because the selected frequency of the wave traveling through the material matches the frequency at which the material vibrates. Since different atoms and molecules have different natural frequencies of vibration, they will selectively absorb different frequencies (portions of the Electromagnetic Spectrum.)

### Investigations and Activities Overview: A synopsis of this lesson is as follows...

In this unit students will investigate wave speed (frequency) and how this applies to the Electromagnetic Spectrum. Students will investigate the kinetic theory to explain how waves travel through different mediums. Students will finally investigate the properties of diamonds to determine how these properties, when manipulated by technology, allow cut diamonds to sparkle.

**Context:** The role that these Investigations and Activities play in the concept development can be explained as ...

This group of investigations and activities build on the concept of mechanical waves. Mechanical waves need a medium to travel through while electromagnetic waves do not. Mechanical waves do not selectively absorb waves while electromagnetic waves will be selectively absorbed as it travels through different sections of the Electromagnetic Spectrum. Electromagnetic Waves should be thought of as the culminating inquiry activities associated with waves that transfer energy.

**Teacher Note:** The Investigations and Activities are listed in the order they would be found in the chapter unit with the exception of Investigation 2: Absorption of Radiant Heat.

### **Activity 1: Wave Speed (Frequency)**

**Purpose:** To have students calculate wave speed.

**Materials:**

- Math Skills Equation: Wave Speed

**Procedure:**

1. Have students identify the wave speed equation.
2. Have students observe and discuss the wave speed example.
3. Have students answer the three practice problems.

More practice problems can be found at [gohrw.com](http://gohrw.com) and enter keyword HK8MP

### **Investigation 1: Wave Speed**

**Purpose:** Students observe the properties of a wave.

**Materials:**

- 3 cm diameter or thicker wooden dowel
- Rectangular Pan
- Water

**Procedure:**

1. Place a rectangular pan on a level surface, and fill the pan with water to a depth of about 2 cm.
2. Cut a wooden dowel (3 cm or thicker in diameter) to a length of slightly less than the width of the pan, and place the dowel in one end of the pan.
3. Move or roll the dowel back and forth slowly, and observe the length of the wave generated.
4. Now move the dowel back and forth faster (to increase the frequency) and observe the wavelength.

### **Analysis Question:**

1. Do the waves always travel at the same speed in the pan? (Students should observe that the velocity of the waves stays the same because it is determined by the medium. Waves of higher frequency will have shorter wavelengths, and waves of lower frequency will have longer wavelengths.)

## **Activity 2: Visible Light and the Electromagnetic Spectrum**

**Purpose:** To compare and contrast Visible Light with other divisions of the Electromagnetic Spectrum.

### **Materials:**

- A picture of the Electromagnetic Spectrum

### **Procedure:**

1. Have students compare and contrast the different regions of Visible Light on the Electromagnetic Spectrum.
2. Have students compare and contrast Visible Light with the other sections of the Electromagnetic Spectrum.

### **Analysis Question:**

1. Formulate a general statement comparing the wavelengths and frequencies at the red and violet extremes of the Visible Light spectrum. (The radiation at the violet end of the spectrum has the shortest wavelengths and the highest frequencies. Radiation at the red end has the longest wavelengths and the lowest frequencies.)
2. How are the different types of electromagnetic waves used on Earth? (Answers can vary. Radio waves transmit radio and TV signals, microwaves power cell phones, **infrared waves supply the Earth's heat, visible light is what we see, Ultraviolet light causes skin diseases and skin mutations, x-rays and gamma rays do not enter our atmosphere but can be recreated in a lab setting for use on Earth. X-rays can be used to make images of bones and gamma rays can be used to treat some cancers and tumors.**)

## **Investigation 2: Absorption of Radiant Heat**

**Purpose:** Students will investigate selective absorption of radiant heat.

### **Materials:**

- 2 empty soup cans
- Lamp
- Black paint
- 2 thermometers

- Cool water

**Procedure:**

1. Obtain two empty soup cans, and remove the labels. Paint the inside and outside of one of the soup cans with black paint.
2. Pour 50 mL of cool water into each can.
3. Place a thermometer in each can and record the temperature of the water in each can at the start. Leave the thermometers in the cans. Aim a bright lamp at the cans, or place them in sunlight.
4. Record the temperature of the water in each can every 3 minutes for at least 15 minutes.

**Analysis Questions:**

1. Prepare a graph. Label the x-axis "Time" and the y-axis "Temperature". Plot your data for each can of water. (Both sets of data should show an increase in the temperature of the water.)
2. The water in which can absorbed more radiation? (The black can should absorb more energy.)
3. Which variables in the lab were controlled (unchanged throughout the experiment)? How did the controlled variables help you obtain valid results? (The starting temperature of the water, the volume of the water, the distance of each can from the light, and the size of each can were controlled variables in the experiment.)
4. Use your results to explain why panels used for solar heating are often painted black? (Black absorbs more energy, which is why solar heating panels are often black.)
5. Based on your results, what color would you want your car to be in the winter? In the summer? Justify your answer. (In winter, a black car would absorb wanted energy, and in summer, a white or silver car would reflect unwanted energy.)

**Investigation 3: Polarization**

**Purpose:** To show how electromagnetic waves can be polarized through selective absorption of Visible Light.

**Materials:**

- 2 polarizing filters.

**Procedure and Analysis:**

1. Polarizing filters block all light waves except for those waves that vibrate in a certain direction. Look through two polarizing filters at once, and note your observations.
2. Now, rotate one filter by  $90^{\circ}$ , and look again. What do you observe this time?
3. Do your observations support the idea that light is a transverse wave? Explain your answer.

### **STEM: Diamond Technology**

Rough Diamonds found in nature do not sparkle. Investigate the technology and engineering principles that allow cut diamonds to sparkle.

#### **Materials:**

- Books
- Magazines
- Computer access

#### **Procedure:**

1. Use any of the materials available to you to investigate the STEM issue above.
2. Present your findings to the class.

#### **Analysis:**

Students will discuss the findings by each group to come to a consensus as to how diamonds can be cut in such a way that light waves can travel through them and allow them to sparkle.

### **Formative Assessment:**

1. Which of the following wave properties is never used in a wave speed calculation: amplitude, frequency, period, or wavelength? (The amplitude of a wave is not related to the speed of the wave.)

### **Summative Assessment:**

See attached assessment

## Electromagnetic Waves Summative Assessment

### Multiple Choice:

1. Where do Electromagnetic waves come from?
  - a. Chemical reactions
  - b. The Sun
  - c. Earth's interior
  - d. The Moon

Explain your answer.

2. How are mechanical waves different from electromagnetic waves?
  - a. Mechanical waves need a medium to travel through.
  - b. Mechanical waves do not need a medium to travel through.
  - c. Mechanical waves can travel through a vacuum.
  - d. Mechanical waves are produced through a vibration of charged particles in space

Explain your answer.

3. The different groups of electromagnetic waves are recorded on the Electromagnetic Spectrum. What distinguishes the differences between the groups?
  - a. They have different frequencies
  - b. They have different wavelengths
  - c. They have different origins
  - d. They have different speeds

Explain your answer.

4. How do X-rays detect broken bones?
  - a. X-rays are selectively absorbed by the bone
  - b. X-rays are reflected off of the bone
  - c. X-rays are transmitted through the bone
  - d. X-rays are refracted from the bone

Explain your answer.

5. Electromagnetic waves carry what form of energy?
- a. Potential energy
  - b. Mechanical energy
  - c. Electrical energy
  - d. Electromagnetic energy

Explain your answer.

**Short Answer:**

Compare and contrast mechanical waves with electromagnetic waves.

**Extended Response:**

Use a diagram to name and illustrate the similarities and differences between the 7 groups of electromagnetic waves.

## Electromagnetic Spectrum: Two Point Rubric

**Two points:** The response must be accurate, complete, thorough, and complete.

**One point:** The response is incorrect, incomplete and/or illogical.

### Multiple Choice:

1. Where do Electromagnetic waves come from?
  - a. Chemical reactions
  - b. The Sun
  - c. Earth's interior
  - d. The Moon

Explain your answer.

Students should record b as the correct answer. Students should understand that electromagnetic energy is carried by electromagnetic waves. Students should explain that electromagnetic waves are radiant energy waves that travel to Earth from the Sun.

2. How are mechanical waves different from electromagnetic waves?
  - a. Mechanical waves need a medium to travel through.
  - b. Mechanical waves do not need a medium to travel through.
  - c. Mechanical waves can travel through a vacuum.
  - d. Mechanical waves are produced through a vibration of charged particles in space

Explain your answer.

Students should record a as the correct answer. Students should understand that mechanical waves result from the organized vibrations of molecules in substances and electromagnetic waves are produced through a vibration of charged particles that can travel through a vacuum. Students should explain that mechanical waves need a medium such as a solid, liquid, or a gas to travel through. Electromagnetic waves do not need a medium to travel through.

3. The different groups of electromagnetic waves are recorded on the Electromagnetic Spectrum. What distinguishes the differences between the groups?
  - a. They have different frequencies
  - b. They have different wavelengths
  - c. They have different origins
  - d. They have different speeds

Explain your answer.

Students should record b as the correct answer. Students should understand the differences between wavelengths and frequencies. Students should explain that wavelength is the only variable that is used to distinguish the differences between groups.

4. How do X-rays detect broken bones?
  - a. X-rays are selectively absorbed by the bone
  - b. X-rays are reflected off of the bone
  - c. X-rays are transmitted through the bone
  - d. X-rays are refracted from the bone

Explain your answer.

Students should record a as the correct answer. Students should understand selective absorption. Students should explain when X-rays are taken of a bone, the bone selectively absorbs the X-ray and any crack in the bone can be seen on the accompanying film.

5. Electromagnetic waves carry what form of energy?
  - a. Potential energy
  - b. Mechanical energy
  - c. Electrical energy
  - d. Electromagnetic energy

Explain your answer.

Students should record d as the correct answer. Students should understand that waves carry energy and this energy comes in many different forms. Students should record specific waves carry specific energy and that electromagnetic waves can only carry electromagnetic energy.

### **Short Answer:**

Compare and contrast mechanical waves with electromagnetic waves.

Students should understand the similarities and differences between mechanic waves and electromagnetic waves. Students should explain that both types of waves carry energy and that both types of waves have the same wave structure. Students should explain that mechanical waves need a medium such as a solid, liquid, or gas to travel through while electromagnetic waves can also travel through a vacuum.

### **Extended Response:**

Use a diagram to name and illustrate the similarities and differences between the 7 groups of electromagnetic waves.

Students should show a diagram of the 7 different groups of electromagnetic waves (Radio-Microwave-Infrared-Visible Light-Ultraviolet-X-ray-Gamma Ray). Students should show that each group has the same amplitude and frequency but the wavelength progressively decreases from Radio waves to Gamma Rays.

# Matter Unit

## Grade 9

Written by Debbie Gilchrist, Innovative Schools

### Standards:

**Standard 2:** Materials and Their Properties

**Strand 1:** Properties and Structure of Materials

**Substrand B:** Elements and compounds are pure substances. Elements cannot be decomposed into simpler materials by chemical reactions. Elements can react to form compounds. Elements and/or compounds may also be physically combined to form mixtures.

**Substrand G:** A change in physical properties does not change the chemical composition of the substance. The physical properties of elements and compounds (such as melting and boiling points) reflect the nature of the interactions among their atoms, ions, or molecules and the electrical forces that exist between them.

**Strand 2:** Mixtures and Solutions

**Substrand B:** A variety of methods can be used to separate mixtures into their component parts based upon the chemical and physical properties of the individual components.

### Goals: In the Investigations and Activities of this unit, students will be able to...

- Explain that matter is composed of tiny particles called atoms that are unique to each element.
- Discuss the relationship between matter, atoms, and elements.
- Distinguish the difference between an element, compound, and a mixture.
- Determine the physical and chemical properties of matter.
- Explain that the physical changes to matter do not change the chemical composition of matter.
- Density is a physical property of matter.

### Main Ideas: The important concepts and skills covered in the Investigations and Activities of this unit are...

- Matter is anything that has mass and takes up space.
- There is a relationship between matter, atoms, and elements.
- Matter can be classified as an element, compound, or a mixture.
- Properties of matter determine their uses. Properties of matter include physical and physical properties.
- Changes in the physical properties of matter do not result in a chemical change to matter.

**Essential Question:** How do the physical and chemical properties of matter determine their use? (Physical Properties: Some materials conduct electricity better than others, some are more durable, some are more flexible, and some conduct heat better than others. Chemical Properties: Some materials are more flammable and some are more reactive which should be taken into consideration when considering use.)

**Investigations and Activities Overview: A synopsis of this lesson is as follows...**

In this unit students will begin by investigating density which is a physical property of matter. Students will then compare substances to determine their physical and chemical properties. Students will identify physical and chemical changes of materials. Students will investigate how the physical and chemical properties of matter will determine their uses. Students will finally apply this information through a STEM investigation of paint chemistry.

**Context: The role that these Investigations and Activities play in the concept development can be explained as...**

This group of investigations and activities build on the particle model that students learned in middle school. Students will begin to understand that matter has physical and chemical properties. Students will understand that the physical properties of matter cannot be changed but that chemical properties can be changed by chemical reactions. In subsequent investigations and activities, students will investigate the connection between matter and energy, matter and the Periodic Table, the structure of matter, chemical reactions, and solutions.

**Teacher Note:** The Investigations and Activities are listed in the order they would be found in the chapter unit.

## **Investigation 1: Investigating Density**

**Purpose:** To introduce students to the physical property of density.

### **Materials:**

- Balance
- Cup
- Egg
- Graduated cylinder, 100 mL
- Salt
- Spoon
- Water

### **Procedure:**

1. Add some water to a cup and begin adding salt.

2. Use a spoon to stir the salt into the water.
3. Place an egg in the cup.
4. Continue adding salt and stirring until the egg begins to float.
5. Remove the egg.
6. Pour the solution into a graduated cylinder until you measure 25mL of solution.
7. Use a balance to find the mass of the 25mL solution.

### **Analysis Questions:**

1. **The density of an object is equal to the object's mass divided by the object's volume.** What is the density of the saltwater solution? (Students should calculate density as mass divided by volume for the solution.)
2. Find the mass and volume of the egg. Use the method of liquid displacement to find volume. What is the density of the egg? (Answers may vary. Students should calculate the density of the egg as the mass of the egg divided by the volume of water displaced by the egg.)
3. Compare your measurements for the density of the solution and the density of the egg. What conclusions can you draw from this comparison? (The density of the solution changes as salt is added. At the point when the egg just barely floats in the solution, its density is equal to that of the solution.)

### **Activity 1: Comparing Substances Demonstration**

**Purpose:** To determine the difference between an element and a compound.

#### **Materials:**

- One vial containing charcoal
- One vial containing granulated sugar
- Two vials: one labeled "hydrogen" and one labeled "Oxygen".

#### **Procedure:**

1. Show students the four vials and tell them that sugar is made from the other three substances.
2. Ask students how sugar is like the substances that form it, and how it differs. (They are all composed of matter. They are different in appearance, state, and solubility.)

### **Activity 2: Chemical Formulas Represent Compounds**

Use the Teaching Transparency TM5 to teach students that chemical formulas represent compounds.

### **Investigation 2: Mystery Mixture**

**Purpose:** Students separate a mixture using Chromatography to determine the difference between the physical and chemical change of matter.

**Materials:**

- Coffee filter
- Clear plastic cup
- Black water-soluble marker
- Pencil
- Tape
- Water

**Procedure:**

1. Place a pencil on a clear plastic cup. Use scissors to cut a strip of paper (3 cm x 15 cm) from a coffee filter. Wrap one end around the pencil. Attach the paper with tape.
2. Take the paper out of the cup. Using a water-soluble, black marker, make a dot in the center of the strip, 2 cm from the bottom.
3. Pour water in the cup to a depth of 1 cm.
4. Lower the paper into the cup. Keep the dot above the water.
5. Remove the paper when the water is 1 cm from the top of the paper. Record your observations.

**Analysis Questions:**

1. What happened as the paper soaked up the water? (The ink in the dot separated into several colors and moved up the paper.)
2. Which colors make up the black ink? (Answers may vary. If several varieties of markers are used, differences in the order and colors of ink can be seen.)
3. Is the ink-making process a physical change, or is it a chemical change. Explain. (The process involved is a physical change. The colors of ink can be separated without changing their chemical makeup.)

### **Activity 3: Mass of Gaseous Matter Demonstration**

**Purpose:** To disprove the misconception that air and gasses have no mass.

**Materials:**

- 2 balloons with the same physical properties.
- Balance

**Procedure:**

1. Have students measure the mass of a deflated balloon and record the mass on the board.
2. Have one student blow up and tie the deflated balloon.

3. Have the students to measure the mass of the inflated balloon and record the mass on the board.
4. Ask students to discuss the discrepancy between the mass numbers and to explain where the extra mass of the inflated balloon came from. (The extra mass is the mass of the air inside the balloon.)

### Investigation 3: Density of Water

**Purpose:** To investigate that the density of water is a physical property of water.

**Materials:**

- Balance
- 250 mL beaker
- 100 mL graduated cylinder
- Graph paper or a graphing calculator
- Water

**Procedure:**

1. Find the mass of an empty 100 mL graduated cylinder.
2. Pour 10 mL of water from a 250 mL beaker into the graduated cylinder. Use a balance to find the mass of the graduated cylinder that contains the water.
3. Repeat Step 2 for several different volumes of water.
4. Use graph paper or a graphing calculator to plot volume (on the x-axis) versus mass (on the y-axis).

**Analysis Questions:**

1. Estimate the mass of 55 mL of water and 85 mL of water. (Predictions should be approximately 55 g and 85 g.)
2. Predict the volume of 25 g of water and 75 g of water. (Predictions should be approximately 25 mL and 75 mL.)
3. Use your graph to determine the density of water. (Students should choose two points on the graph, and divide the difference in the x values by the difference in the y values.)

### Activity 4: Demonstrating the Properties of Iron

**Purpose:** To demonstrate the chemical and physical properties of a material.

**Materials:**

- Magnet
- Steel wool (rusted)
- Steel wool (not rusted)

**Procedure:**

1. Show students both pieces of steel wool.
2. Show them the effect a magnet has on both pieces of steel wool.

**Analysis Questions:**

1. Does steel wool have the same composition after it is rusted? (No.)
2. Is the ability to rust a chemical or a physical property? (Chemical.)
3. Does steel wool have the same composition after it is checked with a magnet? (Yes.)
4. Is the attraction to a magnet a chemical or a physical property? (Physical.)

**Investigation 4: Reactivity**

**Purpose:** To determine how chemical changes can occur through reaction.

**Materials:**

- A cup of baking soda, Labeled A
- 2 clear plastic cups
- Graduated cylinder
- A cup of powdered sugar, labeled B
- Vinegar,

**Procedure:**

1. Measure 4 g of each of the compounds (baking soda and sugar) and place them in separate clear plastic cups.
2. Observe the color and texture of each compound. Record your observations.
3. Add 5 mL of vinegar to each cup. Record your observations.

**Analysis Question:**

1. Baking soda reacts with vinegar, but powdered sugar does not. Which of these two substances is compound A and which is compound B? (Baking soda is A and Powdered sugar is B.)

**Activity 5: Observing Changes in Matter**

**Purpose:** To observe physical and chemical changes in matter.

**Materials:**

- Paper towel
- Pie plate
- Vinegar
- 2 or 3 shiny pennies

**Procedure:**

1. Have students place a folded paper towel in a small pie plate.
2. Have students pour vinegar into the pie plate until the paper towel is damp.
3. Have students place 2 or 3 shiny pennies on top of the paper towel.
4. Ask students if they think a physical or chemical change will occur. (Answers will vary.)
5. Have them put the plate aside for 24 hours. After 24 hours, have students observe the pennies and describe the change that occurred. (The shiny copper surface became coated with a dull, green substance.)
6. Ask students to identify the type of change that occurred. (The change in the appearance of the coins indicates a chemical change.)

**Activity 6: Identifying a Physical or Chemical Change**

**Purpose:** Identify the difference between physical and chemical changes.

**Safety Caution:** If students perform this activity, they should wear safety goggles, gloves and an apron. They should handle the hydrogen peroxide carefully.

**Materials:**

- 3 % hydrogen peroxide ( $\text{H}_2\text{O}_2$ ) solution
- Self-sealing plastic bag
- Small plastic pill bottle
- Steel wool

**Procedure:**

1. Fill the pill bottle halfway with hydrogen peroxide.
2. Place a small piece of steel wool and the pill bottle into the plastic bag, being careful not to spill the hydrogen peroxide.
3. Force the air out of the bag and seal it tightly.
4. Tip the bottle over so that the hydrogen peroxide comes in contact with the steel wool.
5. Have students feel the bag and ask how they know a chemical change has occurred. (A gas was formed that inflated the bag, and the bag's contents became warm.)

**Investigation 5: Can You Separate a Mixture?**

**Purpose:** Students will design an experiment to separate a mystery mixture.

**Teacher Materials:**

- Mystery mixture should contain 5 g samples of salt, sand, iron fillings, and poppy seeds.

**Student Materials:**

- Clear plastic cup
- Distilled water
- Filter funnel
- Filter paper
- Magnet
- Paper towels
- Plastic spoon
- Mystery sample mixture

**Procedure:**

1. Study the sample mixture provided by your teacher.
2. Design an experiment in which the following materials are use to separate the components of the mixture: distilled water, filter funnel, filter paper, magnet, paper towels, clear plastic cup, and plastic spoon.

**Analysis Questions:**

1. What properties did you observe in each of the components of the mixture? (Solubility, magnetism, low density.)
2. How did these properties help you to separate the components of the sample? (Salt is separated by solubility, poppy seeds by density, and iron filings by magnetism.)
3. Did any of the components share similar properties? (Sand, poppy seeds, and iron filings are insoluble; only the iron filings are magnetic.)
4. Based on your observations, what items do you think made up the mixture? (salt, sand, iron filings, poppy seeds.)

**STEM: Paint Chemistry**

Investigate how the data base for paint chemistry is useful in providing information concerning a car crash.

**Materials:**

- Books
- Magazines
- Computer access

**Procedure:**

1. Use any of the materials available to you to investigate the STEM issue above.
2. Present your findings to the class.

**Analysis:**

Students will discuss the findings by each group to come to a consensus as to how paint chemistry is useful in providing information concerning a car crash.

### Formative Assessment:

Which of the following assessments is true?

- A. Chemical formulas tell what state the compound is at room temperature. (Incorrect. State cannot be determined by a chemical formula.)
- B. Chemical formulas give the number and kinds of atoms in a molecule of the compound. (Correct. The chemical symbols represent the kinds of elements, and the subscripts represent the number of atoms.)
- C. Chemical formulas indicate what kinds of substances can undergo a chemical change **to produce the compound.** (Incorrect. Chemical formulas don't indicate reactants that form the products they represent.)
- D. Chemical formulas provide safety information for properly handling chemicals. (Incorrect. A safety or hazard label will provide this information.)
- E. Which of the following terms describes the mass per unit volume of a substance: melting point, reactivity, density, weight? (Density.)
- F. Water turning into steam and gasoline into a gas are both physical changes. (Correct. Both changes are examples of a substance in its liquid form to its gaseous form.)
- G. Dissolving is a chemical change. (Incorrect. Dissolving involves the distribution of a solid or a gas into a liquid. When substances form a solution in this way, it is a physical change.)
- H. In a chemical change, the identity of the substances stays the same. (Incorrect. In a chemical change the identities of the substances change. No new substances are formed in a physical change.)
- I. In a physical change, the energy absorbed goes into changing the identity of the substance. (Incorrect. The identity of the substance does not change in a physical change.)

### Summative Assessment:

See attached assessment and rubric.

## Matter Summative Assessment:

### Multiple Choice:

1. Which of the following is a chemical property of matter?
  - a. Density
  - b. Composition
  - c. Shape
  - d. Texture

Explain your answer.

2. What are materials composed of only one type of atom called?
  - a. Elements
  - b. Compounds
  - c. Mixtures
  - d. Solutions

Explain your answer.

3. The chemical composition of a material is not affected by which of the following?
  - a. Solubility
  - b. A chemical reaction
  - c. A nuclear reaction
  - d. The shape of the material

Explain your answer.

4. Cooking pans are usually made of metal. Why do many of these pans have a wooden handle instead of a metal handle?
  - a. Wood conducts heat
  - b. Wood conducts heat and then loses heat rapidly
  - c. Metals conducts heat
  - d. Both metals and wood conduct heat but wood conducts heat better.

Explain your answer.

5. How are the molecules in a solid different from the molecules in a gas?
- Molecules in a gas are more tightly packed than molecules in a solid.
  - Molecules in a gas cannot move but molecules in a solid can.
  - Molecules in a gas move freely but molecules in a solid are fixed.
  - Molecules in a gas have more density than molecules in a solid.

Explain your answer.

**Short Answer:**

Compare and contrast physical and chemical properties of matter.

**Extended Response:**

How do the structures and properties of a material (matter) determine its use? Give at least one example with your response.

**Multiple Choice:**

1. Which of the following is a chemical property of matter?
  - a. Density
  - b. Composition
  - c. Shape
  - d. Texture

Explain your answer.

Students should record b as the correct answer. Students should explain that the chemical properties of a material are unique to that material. The physical properties of a material may change but the chemical structure of the material will stay the same. Density, shape, and texture are all physical properties of matter.

2. What are materials composed of only one type of atom called?
  - a. Elements
  - b. Compounds
  - c. Mixtures
  - d. Solutions

Explain your answer.

Students should record A as the correct answer. Students should explain that elements are pure substances and cannot be decomposed into simpler materials by chemical reactions. Students should eliminate compound, mixtures, and solutions, because compounds are composed of two or more elements, mixtures are composed of two or more compounds and a solution is a homogeneous mixture.

3. The chemical composition of a material is not affected by which of the following?
  - a. Solubility
  - b. A chemical reaction
  - c. A nuclear reaction
  - d. The shape of the material

Explain your answer.

Students should choose d as the correct answer. Students should understand the differences between physical and chemical properties of matter. Students should explain that physical changes alter some physical properties of a substance but do not alter the chemical composition of the substance. Solubility is the amount of a given substance that can dissolve in a particular solvent (water for the 9<sup>th</sup> grade), and a chemical reaction and a nuclear reaction between atoms will change the chemical property of a material.

4. Cooking pans are usually made of metal. Why do many of these pans have a wooden handle instead of a metal handle?
- Wood conducts heat
  - Wood conducts heat and then loses heat rapidly
  - Metals conducts heat
  - Both metals and wood conduct heat but wood conducts heat better.

Explain your answer.

Students should choose c as the correct answer. Students should understand that the properties and structures of materials determine their use. Students should explain that metals conduct heat and wood does not so many pans will have wooden handles to prevent burns to the person handling the pan.

5. How are the molecules in a solid different from the molecules in a gas?
- Molecules in a gas are more tightly packed than molecules in a solid.
  - Molecules in a gas cannot move but molecules in a solid can.
  - Molecules in a gas move freely but molecules in a solid are fixed.
  - Molecules in a gas have more density than molecules in a solid.

Explain your answer.

Students should choose c as the correct answer. Students should understand the structural differences between solids, liquids, and gases. Students should also understand that the kinetic molecular theory explains that a change in the energy of the particles may result in a temperature change or a change of phase. Students should explain that the molecules in a gas move freely and expand when heated. Molecules in a solid are fixed and although they do move, they do not move freely.

**Short Answer:**

Compare and contrast physical and chemical properties of matter.

Students should understand the concept of physical and chemical properties of matter. Students should explain that all matter has both physical and chemical properties. The physical properties of a material can be changed without altering the chemical composition of the material. Chemical properties can be altered through a reaction between two materials that result in an entirely new substance with different properties.

**Extended Response:**

How do the structures and properties of a material (matter) determine its use? Give at least one example with your response.

Students should understand that the structure of a material is dependent on its internal structure and that the internal structure of a material will determine its strength, flexibility, conductivity, reactivity, and melting and boiling point. Students should explain that some materials conduct electricity better than others, some are more durable, some are more flexible, and some conduct heat better than others. Chemical Properties: Some materials are more flammable and some are more reactive which should be taken into consideration when considering use.)

# Solar Nebular Theory

## Grade 9

Written by Debbie Gilchrist, Innovative Schools

### Standards:

**Standard 4:** Earth in Space:

**Strand 2:** The Solar System,

**Substrand A:** The motion and the basic elements (periodic table) that comprise our Solar System are consistent with the theory that the Solar System emerged from a large disk of gas and dust.

### Goals: In the investigations and Activities of this unit, students will be able to ...

- Explain the evolution of scientific thought using the Solar Nebular Theory.
- Explain the formation of the solar system using the Solar Nebular Theory including the origin of the planets and Sun from the nebula, the evolution of planets, and the dispersal of left over gas and dust.
- Discuss why objects that orbit the Sun have distinctive physical characteristics and orderly motion which are a result of their formation and changes over time.

### Main Ideas: The important concepts and skills covered in the Investigations and Activities of this unit are ...

- A hypothesis can become a theory if it is proven to be true and stands the test of time.
- Observable, predictable patterns of movement in the Sun, Earth, Moon system are caused by gravitational interaction and powered by energy from the Sun.
- Most objects in the Solar System orbit the Sun and have distinctive physical characteristics and orderly motion which are a result of their formation and changes over time.

**Essential Question:** How does the Solar Nebular Theory explain the Solar System's evolution over time? (The Solar Nebular Theory explains how a cloud of dust and gas (nebula) was accreted to form the Sun and the rocky and gas planets over time. The Sun, being the most massive object, became the center of the Solar System and the other objects orbited it. The leftover gas and dust became the moons, asteroids, and comets which also orbit the Sun. As time increased the planets formed layers due to density differences found in their chemical composition. The Internal pressure and radioactive decay caused the heat found internally in many of the planets orbiting the Sun.)

### Investigations and Activities Overview: A synopsis of this lesson is as follows ...

In this unit students will investigate the origin and evolution of the Solar System using the Solar Nebular Theory. They will investigate why the Sun is at the center of the Solar System with all of the other objects revolving around it. Students will estimate the age of the Solar System and will use STEM to investigate how advancements in technology led to the current Solar Nebular Theory.

**Context: The role that these Investigations and Activities play in the concept development can be explained as ...**

This group of investigations and activities act as a culmination to the 9<sup>th</sup> grade year. Frameworks and NAEP all put the Solar Nebular Theory at the end of the 9<sup>th</sup> Grade year. The reasons for this are varied. The Nebula is composed of elements, compounds, and mixtures which are studied at the beginning of the 9<sup>th</sup> grade year (chemistry) and again when students study the chemical and physical properties of rocks and minerals. The Sun, planets, moons, asteroids, and comets were all formed by accretion which is enabled by energy and gravitational attraction, also 9<sup>th</sup> grade topics. Planets developed layers over time due to density differences found in their chemical compositions. This is studied in the Earth Systems component of the 9<sup>th</sup> Grade. Finally, radioactive decay can be explained using radioactive isotopes (Chemistry) and provides heat energy for molten internal areas of select planets and provides the hot molten liquid for volcanoes found on those planets (Earth Systems).

**Teacher Note:** The Investigations and Activities are listed in the order they would be found in the chapter unit.

### **Activity 1: Solar System Formation**

**Purpose:** Students should understand the evolution of scientific thought over time.

**Materials:** None

**Procedure:**

1. Ask students to draw or describe how a baby placed in a student's room might perceive the room.
2. Ask students to think about how the baby's description would change as the baby underwent stages of physical growth.
3. Compare those descriptions with the change from a geocentric to a heliocentric model.

**Analysis Question:**

1. How does a hypothesis change as new information becomes available?

### **Investigation 1: Estimating 4.6 Billion**

**Purpose:** Students should understand the magnitude of 4.6 billion years as the time it has taken for the Solar System to evolve into the entity we know today.

**Materials:**

- Box no longer than 3 inches long on each side.
- Metric ruler
- Popcorn kernels

**Procedure and Analysis Questions:**

1. Find a small box, and measure its length, width, and height.
2. To find the volume of the box, multiply the height by the width by the length.
3. Fill the box halfway with popcorn kernels.
4. Count the number of kernels in the box, and multiply that number by 2.
5. Divide 4,600,000,000 by the total number from step 4 (Answers may vary. Answers should be derived from the following equation:  $\text{volume} = 4.6 \times 10^9 / (2 \times \text{number of kernels})$ ).
6. How big would your box need to be to hold 4.5 billion popcorn kernels? (Answers will vary.)

## **Activity 2: The Nebular Hypothesis**

**Purpose:** For students to understand how accretion played a part in the formation of the Solar System.

**Materials:**

- None

**Procedure:**

1. Have students read the section: The Nebular Hypothesis
2. Have students write a description of the formation of the solar system from the point of view of a particle of carbon dust. Encourage them to describe the collapse of the nebula, the accretion of the planets, and perhaps even the origin of the first carbon-based life.

## **Activity 3: Rocks in Space**

**Purpose:** For students to understand how the leftover gas and dust formed objects in our Solar system other than the Sun and planets.

**Materials:** None

**Procedure:**

1. Have students read the section Rocks in Space.
2. Have students describe the formation of comets, asteroids, and moons as proposed by the Solar Nebular Theory.

**Activity 4: How the Moon Formed**

**Purpose:** For students to investigate the early theories of our moon's formation merged into the current theory of our moon's formation.

**Materials:** None

**Procedure:**

1. Have students discuss or write a paragraph explaining how a collision of Earth with another large body, the process of accretion and gravitational pull likely caused our moon to fall into orbit around our planet, Earth.

**Investigation 2: The Size and Power Output of the Sun**

**Purpose:** Students will use simple devices to calculate the size of the sun and the power output of the sun. Students will learn why the Sun is the most massive object in our Solar System and therefore at its center.

**Materials**

- Aluminum foil
- Modeling clay
- Index card
- Glass jar with a hole in the lid
- Lamp with 100 W bulb
- Meter stick
- Black paint or magic marker
- Straight pin
- Scissors
- Shoe box
- Masking tape
- Celsius thermometer

**Safety:** Goggles should be worn and sharp objects are to be used carefully.

**Procedure:**

## Constructing a Solar Viewer and a Solar Collector

1. Construct a solar viewer in the following way.
  - a. Cut a round hole in one end of the shoe box.
  - b. Tape a piece of aluminum foil over the hole. Use the straight pin to make a tiny hole in the center of the foil.
  - c. Tape the index card inside the shoe box on the end opposite the hole.
2. Construct a solar collector in the following way.
  - a. Cut an 8 cm x 64 cm piece of aluminum foil. Fold it in half lengthwise 5 times to make a 2 cm x 8 cm strip. Wrap the strip snugly around at least half of the bulb of the thermometer, and tape the back of the foil onto the thermometer. Bend **the edges out so that the form "wings"**, as shown in the photo on page 681.. Paint the wings black.
  - b. Slide the top of the thermometer through the hole in the lid of the jar. Use modeling clay and masking tape to hold the thermometer in place.
  - c. Place the lid on the Jar. Adjust the thermometer so that the wings of the foil directly face the lamp.
3. Place the lamp on one end of a table that is not in direct sunlight. Remove any shade or reflector from the lamp.

## Taking Measurements with the Solar Collector

4. Stand in direct sunlight, with your back to the sun, and position the solar viewer so that an image of the sun appears on the index card.
5. Carefully measure and record the diameter of the image of the Sun. also, measure and record the distance from the image to the pinhole.
6. Place the solar collector in sunlight. Tilt the jar so that the sun shines directly on the metal wings. Watch the temperature reading rise until it reaches a maximum value. Record that value. Place the collector in the shade to cool
7. Now place the solar collector about 30 cm from the lamp on the table. Tilt the jar so that the light shines directly on the metal wings. Watch the temperature reading rise until it reaches a stable value.
8. Move the collector toward the lamp in 2 cm increments. At each position, let the collector sit until the temperature reading stabilizes. When you find a point at which the reading on the thermometer matches the reading you observed in step 6, measure and record the distance from the solar collector to the light bulb.

## Analysis Questions:

1. **Analyzing Data** The ratio of the sun's actual diameter to its distance from Earth is the same as the ratio of the diameter of the Sun's image to the distance between the pinhole and the image. Using the formula on Page 681, calculate the diameter of the Sun,  $S$ . (Answers may vary. Values should be fairly close to  $1.4 \times 10^9$  m.)
2. **Analyzing Data** The ratio of the power output of the Sun to the Sun's distance from Earth squared is the same ratio of the power output to the light bulb to the solar collector's distance from the bulb squared. Using the formula on Page 681, calculate

the Sun's power output, P. (Answers may vary. Values should be fairly close to  $3.8 \times 10^{26}$  W.)

### Communicating Your Results

3. **Making Comparisons** How does your value for S compare with the accepted diameter of the sun,  $1.39 \times 10^9$  m? How does your value for P compare with the accepted power output of the Sun  $3.86 \times 10^{26}$  W? (Answers may vary based on the values obtained in the analysis.)
4. **Analyzing Methods** What factors may have caused error in your measurements? If you did the experiment again, how could you minimize such errors? (answers may vary based on the values obtained in the analysis.)

**STEM:** Investigate how the evolution of scientific thought, using advancements in technology, led to the current Solar Nebular Theory.

### Materials:

- Books
- Magazines
- Computer access

### Procedure:

1. Use any of the materials available to you to investigate the STEM issue above.
2. Present your findings to the class.

### Analysis:

Students will discuss the findings by each group to come to a consensus as to how the technology led to the current Solar Nebular Theory.

### Formative Assessment:

1. Summarize the main steps of the current Solar Nebular Theory. (The nebular model states that the solar system formed when a cloud of gas and dust began to collapse because of gravitational attraction. The cloud began to spin as it condensed. A large central bulge gained enough mass to become a star. Planetesimals formed in the spinning disk and grew as they merged with other bodies. As the planetesimals developed stronger gravitational fields, they accreted smaller debris in their path. The planets slowly grew larger and more stable.)
2. Contrast the theory of how our moon formed with how the satellites of gas planets may have formed. (Our moon probably formed after a large body collided with Earth)

during Earth's formation. The moon formed from the debris that was created during this collision. The moons of the gas giants are likely to be small planetesimals and comets that were caught by the gravitational attraction of the gas giants.

3. The current theory of moon formation from the collision of Earth with another body explains the orbiting of Earth around the Sun, tides on Earth, the composition of the moon, or the similarity of the moon with other moons. (Composition of the moon. **The presence of material that is similar but not identical to Earth's material is best explained by the theory of the collision of Earth with another body.**)

### **Summative Assessment:**

See attached assessment and rubric.

## Solar Nebular Theory Summative Assessment

### Multiple Choice:

1. Which of the following statements is true?
  - a. The Earth is at the center of the Solar System
  - b. The Sun is a planet in our Solar System
  - c. The Sun is at the center of the Solar System
  - d. Gravity is a force that is only found on Earth.

Explain your answer.

2. Which object formed first in the Solar System according to the Solar Nebular Theory?
  - a. Sun
  - b. Earth
  - c. Comets
  - d. Asteroids

Explain your answer

3. What are the observable and predictable patterns of the Sun, Earth, and Moon's movement in our Solar System caused by?
  - a. Nuclear Forces
  - b. Electrical Forces
  - c. Gravitational Forces
  - d. Magnetic Forces

Explain your answer.

4. According to the Solar Nebular Theory, what process caused the formation of the Sun, Planets, and other objects in the Solar System?
  - a. Accretion
  - b. Cratering
  - c. Gravity
  - d. Deposition

Explain your answer.

5. What was the Solar Nebula composed of?
- a. Gas
  - b. Dust
  - c. Both dust and gas
  - d. The Sun and the planets

Explain your answer.

**Short Answer:**

When does a hypothesis become a theory?

**Extended Response:**

Explain the formation of the solar system using the Solar Nebular Theory including the origin of the planets and Sun from the nebula, the evolution of planets, and the dispersal of left over gas and dust.

## Solar Nebular Theory: Two Point Rubric

**Two points:** The response must be accurate, complete, thorough, and complete.

**One point:** The response is incorrect, incomplete and/or illogical.

### Multiple Choice:

1. Which of the following statements is true?
  - a. The Earth is at the center of the Solar System
  - b. The Sun is a planet in our Solar System
  - c. The Sun is at the center of the Solar System
  - d. Gravity is a force that is only found on Earth.

Explain your answer.

Students should record c as the correct answer. Students should understand the Sun was formed from the accretion of nebular gas and dust. Students should explain that the Sun is the most massive object in our solar system and pulls all of the other objects in the Solar System towards it.

2. Which object formed first in the Solar System according to the Solar Nebular Theory?
  - a. Sun
  - b. Earth
  - c. Comets
  - d. Asteroids

Explain your answer

Students should record a as the correct answer. Students should understand the Solar Nebular Theory. The Solar Nebular Theory states that our nebula (cloud of dust and gas) probably began to spin and eventually began to collapse. Once the nebula flattened into a spinning disk, a bulge formed at the center of the disk and this bulge became the Sun.

3. What are the observable and predictable patterns of the Sun, Earth, and Moon's movement in our Solar System caused by?
  - a. Nuclear Forces
  - b. Electrical Forces
  - c. Gravitational Forces
  - d. Magnetic Forces

Explain your answer.

Students should record c as the correct answer. Students should understand that force of gravity is the glue that holds the Solar System together. Students should explain that gravity is an attraction between two objects. The amount of gravity is determined by the mass of each object and the distance between the two objects. Once our Solar System formed, objects fell into orbits around the Sun at specific distances and have stayed at those distances over a long period of time. Therefore, patterns found in the Solar System are predictable.

4. According to the Solar Nebular Theory, what process caused the formation of the Sun, Planets, and other objects in the Solar System?
  - a. Accretion
  - b. Cratering
  - c. Gravity
  - d. Deposition

Explain your answer.

Students should record a as the correct answer. Students should understand that the Solar System as we know it today is the result of accretion, density differences, and radioactive decay of isotopes. Students should explain that accretion (the moving together and fusing of dust particles in the nebula) caused the Sun to form first, followed by the rocky planets, the gas giants, and the other objects in the Solar system such as moons, asteroids, and comets.

5. What was the Solar Nebula composed of?
  - a. Gas
  - b. Dust
  - c. Both dust and gas
  - d. The Sun and the planets

Explain your answer.

Students should record c as the correct answer. Students should understand nebula composition. Students should explain that all nebulas are composed of dust and gas and therefore our nebula is also composed of dust and gas.

**Short Answer:**

When does a hypothesis become a theory?

Students should understand the difference between a hypothesis, a theory, and a law. Students should explain that a hypothesis is a guess or a general idea of the outcome of something. A theory has actually been proven and can be backed up by facts.

**Extended Response:**

Explain the formation of the solar system using the Solar Nebular Theory including the origin of the planets and Sun from the nebula, the evolution of planets, and the dispersal of left over gas and dust.

Students should understand the components of the Solar Nebular Theory. Students should explain that the nebular cloud of dust and gas was accreted to form the Sun, the rocky, and the gas planets over time. The most massive object, the Sun, became the center of the solar system and the other objects in the Solar System orbited around it at distances that reflected the gravitational attraction between the object and the Sun. Leftover gas and dust became the moons, asteroids, and comets which also orbit the Sun. As time increased, some planets formed layers due to the density differences of their chemical compositions. The internal heat found in a planet was due to radioactive decay of isotopes deep within the planet.

Unit Title

House and Home

## Delaware World Language Curriculum Unit Template

*Preface: This unit has been created as a model for teachers in their designing or redesigning of course curricula. It is by no means intended to be inclusive; rather it is meant to be a springboard for a teacher's thoughts and creativity. The information we have included represents one possibility for developing a unit based on the Delaware content standards and the Understanding by Design framework and philosophy.*

**Subject/Topic Area: World Languages**

**Grade Level(s): H1**

**Searchable Key Words: house, home**

**Designed By: Jennifer Short**

**District: Red Clay**

**Time Frame: 5 weeks**

### Brief Summary of Unit

**This unit should be taught near the end of the year in the first year of study of the language.**

**Through class discussion, web searches, readings of primary materials, and peer interactions, students will create a dream home and in doing so will discover the cultural similarities and differences between homes in the target language culture and homes in the United States. They will gain communication skills, will express opinions and preferences and will develop cultural perspectives of countries and homes. Students will discover that although all homes share commonalities, the concept of a home is culturally defined.**

### Stage 1: Desired Results

**(Determine What Students Will Know, Do and Understand)**

## Delaware World Language Content Standards

### 1.1 Interpersonal Communication

Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students also express likes and dislikes.

### 1.2 Interpretive Communication

Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. They also comprehend main ideas in oral narratives such as personal anecdote and narratives based on familiar topics.

# Unit Title \_\_\_\_\_

## **1.3 Presentational Communication**

Students write or tell about products or practices of their own culture or the target language cultures. They use language supported by visual cues such as posters, pictures, props, etc.

## **2.2 Cultural Products and Perspectives**

Students identify and observe tangible products of the cultures such as toys, dress, types of dwelling and foods.

## **3.2 Access to Information**

Students use sources intended for same age speakers of the target language to prepare reports on topics of personal interest, or those with which they have limited previous experience.

## **4.2 Cultural Comparisons**

Students speculate on why certain products originate in and/or are important to particular cultures by analyzing selected products from the target cultures and their own.

## **5.2 Enjoyment/Lifelong Learning**

Students use various media from the language and culture for entertainment or personal pleasure.

## **Big Idea**

### **House and Home**

## **Unit Enduring Understandings**

Although houses share commonalities throughout the world, the notion of home is tied to one's culture and personal vision.

## **Unit Essential Question(s)**

- What is a home?
- How and where do I live?
- How and where do people live in the countries where the target language is spoken?
- How does my definition of home compare to that of other students' from other cultures?
- What are my family's responsibilities and routines at home and how do they compare to those of the family in the target culture?

## **Knowledge & Skills**

Students will know...

- house vocabulary
- vocabulary related to chores
- the comparison of adjectives
- the superlative of adjectives

Students will be able to...

- describe the layout of a house
- describe how and where they live
- compare and contrast cultural practices and perspectives
- read and decipher real estate listings in the target language

## Unit Title \_\_\_\_\_

- make and answer questions in the target language
- decipher an authentic story in the target language
- listen and comprehend authentic dialogues in the target language
- design a home in the target language

### Stage 2: Assessment Evidence (Design Assessments To Guide Instruction)

#### Suggested Performance Task(s)

Essential Questions:

- What is a home?
- How and where do I live?
- How and where do people live in the countries where the target language is spoken?
- How does my definition of home compare to that of other students' from other cultures?
- What are my family's responsibilities and routines at home and how do they compare to those of the family in the target culture?

#### SUMMATIVE IPA

**Scenario:** You and your family are moving to another country in the target language culture. You need to acquire a place to live.

**Interpretive Task #1:** Read and analyze the real estate ads about four homes and answer the questions that follow them. [../Downloads/Apartamento en Venta-1.doc](#)

**Interpretive Task #2:** Since you need to acclimate to your new environment, read the article about what common chores and responsibilities are prevalent in the target language culture. Students will complete in the target language a Venn Diagram [\\rcdhs-1\users-new\\$\Jennifer.Short\House and Home\Venn Diagram For.htm](#) finding similarities and differences based on the reading.

**Interpersonal Task:** Students are grouped in pairs in a role play where one student acts as realtor and the other acts as a client. The client has limited resources but wants the most for his/her money. The realtor is trying to pawn off an expensive but dilapidated house that has been on the market for 5 years. Discussion must take place in target language using vocabulary from this unit. Rubric ([\\rcdhs-1\users-new\\$\Jennifer.Short\House and Home\interpersonal task rubric.htm](#))

#### Presentational Task:

You and your family are moving to another country in the target language culture. You need to acquire a place to live.

- G- Create a real estate listing for your ideal home in the target language culture.
- R- As the only family member who speaks the target language fluently, you are an advisor.
- A- Advisor
- S- You and your family are moving to another country in the target language culture. You need to acquire a place to live.
- P- Low level: Create a real estate listing including photos/drawings/pictures/graphics in target language. In a paragraph, in English, justify your choices.  
High level: Create a real estate listing including photos/drawings/pictures/graphics in target language. In a paragraph, in target language culture, justify your choices.
- S- Choose a country or region of the country in the target language culture. Research homes in the target language culture, taking into consideration the following geography, climate, people,

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lifestyle, curb appeal, and your family size. Rubric [\\redhs-1\users-new\\$\Jennifer.Short\House and Home\GRASPS rubric.htm](\\redhs-1\users-new$\Jennifer.Short\House and Home\GRASPS rubric.htm)

## Rubrics/checklists for Performance Tasks

[Interpretive Task #1 Rubric](#)

[Interpretive Task #2 Rubric](#)

[Interpersonal Task Rubric](#)

[Presentational Task Rubric](#)

## Other Evidence

Ongoing formative assessments and observations.

## Student Self-Assessment and Reflection

Written Reflection: Has your opinion of homes and houses in Spanish-speaking countries changed since you began this unit? Why or why not?

Students will complete the “I can…” check-list at the end of the each lesson.

1. \_\_\_\_ I can use the target language vocabulary relating to parts of the house and chores to communicate my thoughts.
2. \_\_\_\_ I can make comparisons between two or more things or people in the target language.
3. \_\_\_\_ I can make superlative statements in the target language.
4. \_\_\_\_ I can make and answer questions in the target language.
5. \_\_\_\_ I can describe the layout of a house in the target language.
6. \_\_\_\_ I can compare and contrast houses in the United States with those in the target language culture.
7. \_\_\_\_ I can compare and contrast household chores of students in the United States with those of students from the target language culture.
8. \_\_\_\_ I can decipher an authentic story in the target language.
9. \_\_\_\_ I can listen and comprehend authentic dialogues in the target language.
10. \_\_\_\_ I can design a home in the target language.
11. \_\_\_\_ I can read and decipher a real estate ad in the target language.

### Stage 3: Learning Plan

(Design Learning Activities To Align with Goals and Assessments)

#### Key learning events needed to achieve unit goals

#### Lesson in Model Resource Unit:

Lesson 1: Parts of a house

Lesson 2: Comparison of homes in Spanish-speaking countries and the United States of America

Lesson 3: Identification of the best, worst homes in Spanish-speaking countries

Lesson 4: Chores and daily routines

**Lesson 1:** Parts of a house

**Essential Question:** What is a home?

# Unit Title \_\_\_\_\_

**Background:** All Level 1 material and material from Units 1-5 of Spanish II

Strategy 1: Present big theme and enduring understandings as well as the essential questions and objectives for the unit.

Strategy 2: Introduction to vocabulary.

- Students placed into groups of 2 or 3.
- Students brainstorm, in groups or individually, on looseleaf paper, as many parts of the house as possible in a certain time.
- Teacher presents a list of vocabulary on board or overhead in target language.  
[../Downloads/mru - hh/Notas - la casa.doc](#)
- Students match as many vocabulary words as possible in a given time.

Strategy 3: Teacher distributes a picture of a part of a house to each group. [\\rcdhs-1\users-new\\$\Jennifer.Short\House and Home\rooms flashcards.pdf](#)

- In target language, students label the room and all items present in the picture.
- Teacher reads each item one by one, students repeat. For each item, the group that used that vocabulary word raises their hand and says the definition in English.
- Students complete a handout or make notes of vocabulary

Strategy 4: Verbal practice: Teacher will distribute handout with pictures of the words. Students will take turns asking "¿Donde pongo...?" each item and their partner will have to answer with the correct room of the house. [../Downloads/mru - hh/casa - verbal - furniture.doc](#)

Strategy 5: Listening Comprehension. [../Downloads/mru - hh/listening - lesson 1, strategy 4.doc](#)- Students will look at an illustration on the handout. Pictures A and B represent the same room at two different times. Students will hear 8 statements. They are to listen carefully and determine whether the statement applies to Scene A or Scene B. Then they circle the corresponding letter on the handout. They will hear each sentence twice. [listening activities.pdf](#)

Strategy 6: Reading Comprehension. Complete either the lower level or upper level story, based on a diagram of a house, and use the new vocabulary from this unit to fill in the missing words. [\\rcdhs-1\users-new\\$\Jennifer.Short\House and Home\Reading Comprehension house diagram.pdf](#)

- Low level: provide a word bank [../Downloads/mru - hh/low level diagram - lesson 1, strategy 5.doc](#)

- High level: no word bank [../Downloads/mru - hh/high level diagram - lesson 1, strategy 5.doc](#)

Strategy 7: An "architect" and/or "designer" from the Extreme Home Makeover team is coming to interview the family of five for whom they are building a house. The interviewer needs to ask questions in the target language in order to gather information from the family concerning the layout of their dream home. The interview is to be conducted in the target language, with the interviewer recording the responses of the family member being interviewed. [../Downloads/mru - hh/Extreme Home Makeover.doc](#)  
For example...

1. How many stories would you like for your house?
2. Do you need any ramps installed?
3. How many bedrooms would you like?
4. Kitchen design (how many sinks? eat in kitchen? "galley" style?)
5. How many rooms would you like in total?
6. Any special requests (media room, office, playroom)?
7. Any outdoor living area wanted (deck, porch, patio)?
8. What types of flooring? (wood, tile, carpet)
9. Would you like a garage, carport area, parking consideration?
10. Pool, basketball court, driveway?
11. How many bathrooms would you like?

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12. What type of bathroom design would you like (lavatory, full bath, shower, bidet)?

Strategy 8: Presentational task/GRASPS task: As an architect for Extreme Home Makeover, a show about building homes for deserving families. You must design a dream home keeping in mind certain criteria.

G- Create a blueprint of a dream home

R- An architect from Extreme Home Makeover

A- A well-deserving family of 5

S- As head architect of Extreme Home Makeover you must design a home for a family of 5 in the target language culture.

P- Create a blueprint/design of the new home using vocabulary from this unit.

S- All labels must be in target language. Each room must have at least 3 different items labeled.

Rubric (other possible outcomes: a brochure, a model home, a Power Point presentation, or a booklet) [GRASPS rubric Home Makeover.xls](#)

Strategy 9: Formative Assessment: Quiz on lesson 1 [../Downloads/mru - hh/quiz - lesson 1.doc](#)

**Lesson 2:** Comparison of homes in the target language countries and the United States of America

**Essential Question:** How and where do I live?

**Background:** All material covered in lesson 1

Strategy 1: Go over essential question to introduce lesson

Strategy 2: La maison de Stéphanie

- Students [read letter](#) orally. Each student reads one sentence at a time. Then answer the following questions orally
  - In what city does she live?
  - How many floors are there?
  - How many rooms are there?
  - Who is in Stéphanie's family?
  - What is her house like?
  - Based on the letter what is one of Stéphanie's interests?
  - Where do Stéphanie and her family picnic?
- Students then respond in writing in the target language to the following questions. In groups of 2 students share their answers orally in the target language.
  - Describe the place where you live.
  - Describe your house/apartment.
  - Describe your room.
  - Describe some particular characteristics of your house/apartment

Strategy 3: Cultural Reading- Students will read the two cultural passages and complete a Venn diagram, which they make themselves, by making comparisons between the two countries and the United States.

- [France](#)
- [Cameroun](#)

Strategy 4: Comparison Introduction

- Using the letter from Strategy 2 the teacher will write the following sentences on the board in the target language
  - Stephanie's house has three bedrooms.
  - Stephanie's house has three floors.
  - Stephanie's house has a balcony.
  - Stephanie's house has one bathroom.
  - Stephanie has 4 people in her family.

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- Teacher asks the students the following questions and writes their responses next to the corresponding statement on the board.
  - How many bedrooms does your house have?
  - How many floors does your house have?
  - Do you have any balconies? If so, how many?
  - How many bathrooms?
  - How many family members are in your family?
- In English, teacher asks how students would compare the responses. (Answers will vary: example- Stephanie’s house has more bedrooms than Sarah’s house.) Teacher then asks students to respond in target language leaving out any unknown information. Teacher tells students the missing information needed to complete the sentences is a comparison.

**Strategy 5:** Teacher presents comparisons on board describing what they are, and how to use them properly in sentences. From previous activity students are asked to fill in missing information in target language based on the comparison rules explained by teacher in strategy 3.

**Strategy 6:** [Writing Proficiency on Comparisons](#)- (Individual Practice) Teacher circulates and corrects individual problems. Students can be paired low level with high level when necessary.

**Strategy 7:** Previous student homework assignment: In English write sentences using more...than, less...than and equal to. For each one, students must have 3 sentences using an adjective, adverb and noun.

- Teacher collects sentences then groups students in 3.
- Teacher distributes sentences randomly to groups.
- Students work together to translate the sentences in the target language.

**Strategy 8:** [Listening comprehension](#) – Listen to sentences on comparisons and mark the corresponding sentence. If not all students are able to have a computer this can be done as a whole class on a big screen TV.

**Strategy 9:** Students are given pictures, one dilapidated and one luxurious. [less2strategy9 - 2 casas.doc](#) They must choose the home in which they prefer to live and justify why by writing comparative statements. [../Downloads/mru - hh/rubric luxurious or dilapidated house.xls](#)

**Strategy 10:** Formative assessment: Quiz on lesson 2. [../Downloads/mru - hh/quiz - lesson 2.doc](#)

**Lesson 3:** Identification of the best, worst, oldest, etc. homes in the target language cultures

**Essential Questions:** How and where do I live? How and where do people live in the countries where the target language is spoken?

**Background:** All material covered in lesson 1 and 2

**Strategy 1:** Superlatives Introduction: Students must interview 4 students in target language in order to fill out a grid about their homes. [../Downloads/mru - hh/superlative intro - strategy 1, 3.doc](#)

	Student 1	Student 2	Student 3	Student 4
How many bedrooms do you have?				
How many gardens?				
How many garages?				
How many computers?				
How many rooms?				

In English, teacher asks students who has the most/least for each question. Teacher writes responses on board.

**Strategy 2:** From strategy 1 the teacher explains what the superlative is and how to use it.

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Strategy 3: Based on the responses from the interviews, students write a superlative sentence for each question response. Students must use the 5 most and the 5 least. Teacher calls on students to share answers orally.

Strategy 4: Teacher places pictures of celebrities on board.

- Students must write a sentence in their notebook using the superlative for each of the following (tallest, oldest, prettiest, youngest, the best) based on their opinions.
- Large paper is placed around the room, one for each celebrity. The papers should be labeled with the celebrity's name.
- Students must write one sentence for each celebrity on the paper.
- Teacher calls on students to present responses.

Strategy 5: Writing Proficiency Practice on Superlatives. Teacher circulates and corrects individual problems. Students can be paired low level with high level when necessary. [../Downloads/mru - hh/Superlative of Adjectives practice.doc](#)

Strategy 6: Round Robin- Students are placed into groups of four. Every student writes on a piece of paper an adjective. The student then passes the paper to the person on their right. That student writes a sentence using the adjective. Then the student passes the paper to their right again. That student writes a comparative statement using the same nouns, verbs, and adjective as in the previous sentence. Then the student passes the paper to their right one last time. That student writes a superlative sentence using the same nouns, verbs, and adjective as in the previous sentence. All sentences are read out loud to the entire class.

Strategy 7: Formative assessment: Quiz on lesson 3 [..\Spanish house and home\Quiz on Superlatives.doc](#)

Strategy 8: Students are given scenarios in the target language. For each scenario they must write 2 comparative statements and 2 superlative statements. [lesson3strat17.doc](#)

## **Lesson 4:** Chores and daily routines

**Essential Questions:** How do I live? What are my family's responsibilities and routines at home and how do they compare to those of the family in the target culture?

**Background:** All material covered in lessons 1, 2, and 3.

Strategy 1: Go over essential questions to introduce lesson.

Strategy 2: After oral discussion of questions, place large pieces of paper around room.

- Write the following headings on the papers: Chores inside the house, Chores outside the house, and Cultural Routines.
- Students walk around to each paper and write one thing specific to their family in English.
- Oral discussion of similarities and differences regarding responses.

Strategy 3: Introduction to vocabulary. Place one of the large pieces of paper next to the board. For each paper write the corresponding vocabulary on board in target language. There may be a need to include more vocabulary. Students will practice pronunciation by listening to the teacher and repeating what he/she says. [../Downloads/mru - hh/Vocabulario - chores.doc](#)

Strategy 4: Power Point Presentation. Teacher presents power point "Como ayudas en la casa?" As teacher goes through presentation students guess what chore is being shown. Then teacher will click to reveal the correct answer. Students will repeat sentence in target language. [../Downloads/mru - hh/power point chores.ppt](#)

Strategy 5: Battleship. [\\rcdhs-1\users-new\\$\Jennifer.Short\House and Home\battleship.doc](#). Print enough copies so that each student has one board. Students draw a boat in 5 boxes on their game board. Students do NOT share where their boats are. In pairs students try to find out where their opponent's boats are by

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asking questions in the target language, such as “¿Plancha tu hermana la ropa?” If the opponent has a boat in the corresponding box on their sheet they must put an X through it and say “Darn!” = “¡Caramba!” Then it’s the opponent’s turn to ask the question. When one of the students’ boats are all sunk, the other student wins.

Strategy 6: [Writing Proficiency](#)- Chore vocabulary (Individual Practice). Teacher circulates and corrects individual problems. Students can be paired low level with high level when necessary.

Strategy 7: [Reading Comprehension](#)- Students read a story about a teenager’s daily chores. In pairs students must answer the questions about the text.

Strategy 8: [Listening Comprehension](#): Students will hear people asking questions in different situations. They are to select the most logical answer and circle the corresponding letter on their [answer sheet](#).

Strategy 9: [Writing Proficiency](#)- Students will write questions, in the target language, based on the given pictures of something they like to do and something they don’t like to do at home. Teacher circulates and corrects individual problems.

Strategy 10: Family Feud- Divide the class into rows each as a team, the topic is “Chores.” The teacher starts of “En la sala, se...” (In the living room, one...). Each team must provide a chore that is done in the living room. The first team unable to contribute an acceptable answer will receive a penalty point. Continue to play game with other parts of the house. Game should be played no longer than 10 minutes.

Strategy 11: Listening Comprehension- This should be done in a computer lab. Listen to the following conversation about Leïla and her mother. Do the following exercises then continue on to the next.

- [Part 1](#).
- [Part 2](#)
- [Part 3](#)
- [Part 4](#)

Strategy 11: Formative assessment: Quiz on lesson 4 [./../Downloads/mru - hh/Quiz on lesson 4.doc](#)

## Resources & Teaching Tips

- Bragger, Jeannette D. and Donald B. Rice. Allons-y! Le Français par Étapes. Fourth edition 1996: Heinle & Heinle Publishers, p. 247
- Valette, Jean-Paul and Rebecca M. Discovering French Blanc Lesson Quizzes and Listening Comprehension. 1994: D.C. Heath and Company, (Quiz 21 and Test Unit 6)
- Bragger, Jeannette D. and Donald B. Rice. Allons-Voir! Les Français et les Francophones. 1992: Heinle & Heinle Publishers, pgs. 58-59, 63, 66-67, 70-72, and 88-91
- 
- Lesson 1: Reinforcement
  - Parts of the house notes: [http://www.french-linguistics.co.uk/phrase\\_book/en/house\\_and\\_home.html](http://www.french-linguistics.co.uk/phrase_book/en/house_and_home.html)
- Lesson 2: Reinforcement
  - Comparison notes
    - [http://books.google.com/books?id=n19cAAAAMAAJ&pg=PA107&lpg=PA107&dq=french+comparison+of+adjectives+and+adverbs+exercices&source=web&ots=wqPjaFmsLj&sig=u9M2VnbpLnNQ1aFtS6n4\\_6HGSNU&hl=en&sa=X&oi=book\\_result&resnum=2&ct=result#PPA107,M1](http://books.google.com/books?id=n19cAAAAMAAJ&pg=PA107&lpg=PA107&dq=french+comparison+of+adjectives+and+adverbs+exercices&source=web&ots=wqPjaFmsLj&sig=u9M2VnbpLnNQ1aFtS6n4_6HGSNU&hl=en&sa=X&oi=book_result&resnum=2&ct=result#PPA107,M1)
    - <http://www.laits.utexas.edu/tex/gr/adj6.html> (also includes exercises for practice)
    - [http://www.staff.city.ac.uk/~ra735/grammar/french/nounadjectivepronoun/comp\\_sup.html](http://www.staff.city.ac.uk/~ra735/grammar/french/nounadjectivepronoun/comp_sup.html) (also includes exercises for practice)

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- [More Notes](#)
- Lesson 3: Reinforcement
  - Superlative notes
    - <http://www.laits.utexas.edu/tex/gr/adv4.html> (also includes exercises for practice)
    - [http://www.staff.city.ac.uk/~ra735/grammar/french/nounadjectivepronoun/comp\\_sup.html](http://www.staff.city.ac.uk/~ra735/grammar/french/nounadjectivepronoun/comp_sup.html) (also includes exercises for practice)
- Lesson 4: Reinforcement
  - Chore Vocabulary:
    - <http://www.quia.com/jg/215618.html>
    - (make your own flashcards)  
<http://www.flashcardexchange.com/flashcards/list/504017>
    - [What? When? Where? Why? For chores](#)
    - [Chore grid](#)

### Accommodation/Differentiation ideas and tips

- 1) Refer to resources for extra practice.
- 2) Lesson 1 Strategy 5: Low level will have a word bank. High level will not have a word bank.
- 3) Lesson 1 Strategy 6: Low level- interviewer asks questions in English. High level- interviewer asks questions in target language.
- 4) Lesson 1 Strategy 9: Low level- students create a blue print. High level- students create a power point presentation, a brochure, a booklet, or a model.
- 5) Lesson 3 Strategy 4: Low level- choose 2 out of the 4 celebrities on whom to write a sentence. High level- write one sentence for each celebrity.
- 6) Grouping- high level students may be paired with low level students.

### Technology Integration/Content Connections

**Incorporated throughout lesson and as extra resources.**

Unit Title

Student Life

## Delaware World Language Curriculum Unit Template

*Preface: This unit has been created as a model for teachers in their designing or redesigning of course curricula. It is by no means intended to be inclusive; rather it is meant to be a springboard for a teacher's thoughts and creativity. The information we have included represents one possibility for developing a unit based on the Delaware content standards and the Understanding by Design framework and philosophy.*

**Subject/Topic Area: World Languages**

**Grade Level(s): H2**

**Searchable Key Words: schedules, classes, activities, sports, leisure**

**Designed By: Jennifer Short, Gina Travalini**

**District: Red Clay**

**Time Frame: 2-4 weeks**

**Reviewed by:**

**Date:**

### **Brief Summary of Unit**

This unit is taught at the beginning of the school year, and it builds on the Level 1 unit entitled, My School. This unit is more in-depth because it challenges students to reach out to students in their target language culture and learn more about their school experience. The transfer task focuses on interacting with an exchange student from the target language culture.

### **Charter School Unit Modification**

#### **Guiding Questions**

1. Why was this model unit of instruction selected as part of your schools' curricular submission?

This unit helps students to build connections between their own language and culture and the students and culture of Spanish-speaking countries.

2. What modifications have been made to the model unit of instruction to meet the specific needs of the student population your school serves?

No modifications will need to be made based on the student population.

3. What modifications have been made to the model unit of instruction that reflect the resources (human, time, building, technology etc.) available to your school?

No modifications will need to be made based on the resources available. The high school will have classrooms for students.

4. Describe any other modifications that have been made to the model unit of instruction that will assist in the curricular review for your school.

No other modification will need to be made to the unit.

# Unit Title \_\_\_\_\_

## Stage 1: Desired Results (Determine What Students Will Know, Do and Understand)

### Delaware World Language Content Standards

#### 1.1 Interpersonal Communication

Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students exchange information about personal events, memorable experiences and other school subjects with peers, and/or members of the target cultures.

#### 1.2 Interpretive Communication

Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.

#### 1.3 Presentational Communication

Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target culture.

#### 2.2 Cultural Products and Perspectives

Students search for, identify and investigate the function of utilitarian products (e.g., sports equipment, household items, tools, foods and clothing) of the culture studies as found within their homes and communities.

#### 3.2 Access to Information

Students read, listen to and talk about age-appropriate school content, folk tales, short stories, internet sites, poems and songs written for native speakers of the target language.

#### 4.1 Language Comparisons

Students demonstrate an awareness of ways of expressing respect and communicating status differences in their own language and the language they are learning.

#### 4.2 Cultural Comparisons

Students hypothesize the relationship between the products and perspectives in the cultures studied and compare and contrast them with their own.

**Big Idea** (This should include transferable core concepts, principles, theories, and processes that should serve as the focal point of curricula, instruction, and assessment. Ex: Home; Friendship; Immigration.)

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**Unit Enduring Understandings** (This should include important ideas or core processes that are central to the unit and transferable to new situations beyond the classroom. Stated as full-sentence statements, the understandings specify what we want students to understand about the Big Ideas Ex: People live differently in different cultures; their homes reflect cultural perspectives.)

High school students across the world share some common school experiences, although differences exist due to culture.

**Unit Essential Question(s)** (This should include open-ended questions designed to guide student inquiry and focus instruction for “uncovering” the important ideas of the content. Ex: *What is healthful eating? What would it be like to live in a home in China?* Unit assessment should focus on these questions.)

- What is my high school experience?
- What is high school like for students in other cultures?

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**Knowledge & Skills** (This should include key knowledge and skills that students will acquire as a result of this unit? Ex: possessive adjectives, present tense of the verb “to have”.)

It should also include what students will eventually be able to do as a result of such knowledge and skill  
Ex: Ask questions and provide responses; Comprehend basic directions.) **[Grade Level Expectations]**

Students will know...

- Vocabulary relating to school subjects, sports, and extra-curricular activities.
- Present tense of regular verbs
- Present tense of irregular verbs (to have, to be, to go, to come, to do, to play, to start, to eat lunch, to think, to be pleasing to)
- Near future (to go + infinitive)
- Agreement and placement of adjectives
- How to make and answer questions

Students will be able to...

- Discuss classes and extra-curricular activities in the target language
- Compare and contrast classes and extra-curricular activities in the United States and in the target language culture
- Decipher an authentic report card in the target language
- Identify classes and extra-curricular activities in the target language
- Create a course schedule and extra-curricular request form in the target language.
- Interview a student in the target language about his/her current classes and activities as well as future classes and activities
- Write an article in the target language about classes and extra-curricular activities
- Persuade others in the target language to participate in a specific extra-curricular activity

## Stage 2: Assessment Evidence (Design Assessments To Guide Instruction)

### Suggested Performance Task(s)

Essential Questions:

- What is my high school experience?
- What is high school like for students in other cultures?

### SUMMATIVE IPA

**Scenario:** Your family is hosting an exchange student from the target language culture. You need to help him/her decide his/her future school schedule and extra-curricular activities.

**Interpretive Task #1:** Students should read the attached report card for a student attending high school in the target language culture and answer the following questions in English by writing the answers on paper. [Rubric for interpretive task 1 - spanish.doc](#)(\*These questions should be written in the target language even though the students are to answer them in English.)

- What is the student’s name?

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- In what grade is the student?
- What subjects is the student studying?
- In what subject is the student receiving the best grade? The worst grade?
- What is the name of the school and what type of high school is it?
- Based on how well the student is performing, what classes do you think the student would be interested in taking next year? Why?

**Interpretive Task #2:** Read an article about students in the target language culture regarding extra-curricular activities. Students are to answer the following questions in English by writing the answers on paper.

- How many activities does he/she participate?
- List the sports in which he/she participates.
- List any clubs of which he/she is a member.
- Are any of these activities affiliated with school? If so, which ones?

**Interpersonal Task:** Students work in pairs in the target language to talk about the similarities and differences with their classes and activities and those from the target language culture (refer to report card). Students will complete a [Venn Diagram For.mht](#) based on their conversation. [interpersonal rubric.htm](#)

**Presentational Task:** Students are given two forms from their guidance counselor, one on [course selections](#) and the other on desired [extra-curricular activities](#). They are to write the desired courses in the target language for the exchange student for the upcoming school year based on the previous courses on the report card from interpretive task #1. They should also include extra-curricular activities for the exchange student based on the blog from interpretive task #2 and the interpersonal task. Students must write a letter to their guidance counselor explaining their selections for the exchange student, justifying why they are going to require those classes and activities. [Guidance counselor letter.doc](#)

- G- Student selects courses and extra-curricular activities.
- R- Student serves as advisor to exchange student
- A- Guidance counselor and exchange student
- S- Recommending a schedule
- P- Completed course selection form and desired extra-curricular activity form and paragraph of justification
- S- Students must write a paragraph explaining their selections for the exchange student, justifying why they are going to require those classes and activities. Students must use the future tense.

**Rubrics/checklists for Performance Tasks** (This should include holistic or analytic-trait rubrics used as a scoring guide to evaluate student products or performances.)

[guidance counselor letter.htm](#)

**Other Evidence** (This could include tests, quizzes, prompts, student work samples, and observations used to collect diverse evidence of student understanding.)

### Student Self-Assessment and Reflection

Students will complete the “I can...” check-list at the end of the each lesson.

1. \_\_\_\_\_ I can use vocabulary relating to school subjects, sports, and extra-curricular activities to communicate my thoughts.
2. \_\_\_\_\_ I can conjugate present tense of regular verbs.

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3. \_\_\_\_ I can conjugate present tense of irregular verbs.
4. \_\_\_\_ I can conjugate the near future tense.
5. \_\_\_\_ I can make agreements of adjectives and properly place them in a sentence.
6. \_\_\_\_ I can make and answer questions.
7. \_\_\_\_ I can discuss classes and extra-curricular activities in the target language.
8. \_\_\_\_ I can compare and contrast classes and extra-curricular activities in the United States and in the target language culture.
9. \_\_\_\_ I can decipher an authentic report card in the target language.
10. \_\_\_\_ I can identify classes and extra-curricular activities in the target language.
11. \_\_\_\_ I can create a course schedule and extra-curricular request form in the target language.
12. \_\_\_\_ I can interview a student in the target language about his/her current classes and activities as well as future classes and activities.
13. \_\_\_\_ I can write an article in the target language about classes and extra-curricular activities.
14. \_\_\_\_ I can persuade others in the target language to participate in a specific extra-curricular activity.

<b>Stage 3: Learning Plan</b> (Design Learning Activities To Align with Goals and Assessments)
<b>Key learning events needed to achieve unit goals</b>

### Lessons in Model Resource Unit:

- Lesson 1: Describing schools and courses.  
Lesson 2: Describing extra-curricular activities and future events.

### Lesson 1: Describing schools and courses.

**Essential Questions:** What is my high school experience? What is my high school like for students in other cultures?

**Background:** dates, times, numbers, alphabet, and level 1 curriculum (See resources and teaching tips for additional worksheets on this topic.)

Strategy 1. Present big theme and enduring understandings as well as the essential questions and objectives for the unit.

Strategy 2. KWL- Students will fill out a [KWL Chart.doc](#) regarding school life in the target culture. Have students pair share and then culminate the results of their previous knowledge by presenting their results to the class and adding new vocabulary to their chart.

Strategy 3. Look at several examples of class schedules. Identify cognates. Complete a dictionary activity to look up unknown vocabulary words and create a vocabulary list. Students present findings to class.

Strategy 4. [Flashcards](#): show students pictures representing each class and have students listen and repeat the correct term for each in the target language. Show word in target language on reverse side. (see Accomodations for extra tips)

Strategy 5. Students listen to an [audio](#) of native speakers talk about their school classes and schedule. Complete the [worksheet](#) based on the information in the audio clips. (See resources and teaching tips for additional worksheets on this topic.)

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Strategy 6. Create a verbal charade game, “Catch phrase.” Students are put in groups and given a flashcard of a class. Students must create 3 sentences in the target language describing the class without using the word. Each group must read the descriptions to the class. The class must guess the correct answer.

Strategy 7. Grammar of regular and irregular verbs [Practice with Common Irregular Verbs.doc](#)- modeling, rule instruction, a worksheet. (See resources and teaching tips for additional worksheets on this topic.)

- Students generate a list of previously learned verbs in their notebook.
- Teacher compiles list of verbs on board and includes any other important ones that were not mentioned.
- On board teacher and students go through the list of verbs dividing them up into categories related to verb endings, i.e., ar verbs, ir verbs, and er verbs as well as irregular verb category.
- Teacher then reviews conjugation of each category of verbs, giving examples of how each verb is used in a sentence. Students take notes.
- Students complete a worksheet on regular [The Present tense.docm](#) and [irregular](#) verbs.
- Break students into groups of three to do a Round Robin activity creating sentences. Each student should take out a piece of paper and write a subject on their paper (e.g. The boy, I, Elena...). They then pass the paper to their left. On the paper in front of them, they should then add a verb, conjugated correctly to fit the subject in the present tense. They then pass their papers to the left. On the paper in front of them, they should finish the sentence, by adding some additional information that fits with the subject and verb. At the end, each student (regardless of his/her group) should have a total of 6 sentences. All group members are responsible for making sure to check for grammar and content.

Strategy 8. Review adjectives with instruction, modeling, and worksheet.

- [Flashcards](#): Students are shown several pictures of different people and emotions, classes, and objects. Based on each picture, students are to write as many adjectives as possible.
- The teacher and students then compile a master list which is written on the board.
- In groups of 2, students must group the adjectives into categories based on patterns of masculine/feminine and singular/plural. Based on student responses, the teacher will write findings on board and then review the patterns.
- Students complete [worksheet on adjective formation](#).
- Teacher explains placement of adjectives in sentences by showing the pictures used in the first task and writing a sentence for each on board. Students must also write at least one other sentence, not using the same adjective as the example. Responses are read aloud and written on board.
- Students complete a [worksheet on placement of adjectives](#).

Strategy 9. Review question formation and how to respond to questions.

- On the board the teacher writes several questions using different question words and different forms. Students must underline the question words and circle any common words/expressions (tag words, punctuation, inversion). Then divide the questions into 2 groups: yes/no questions and information questions.
- Based on student responses, the teacher goes over the correct answers and places the questions based on the patterns that were found into one of the 2 categories. Teacher reviews formation of questions based on patterns and examples.
- Based on the questions, the teacher reviews how to respond correctly to questions. The teacher responds to several of the questions (modeling). The students then respond to the remaining questions in their notebooks. After several minutes, students are asked individually to answer the questions aloud.
- Students complete [worksheet on question formation](#).
- Break students into small groups for the Toss-a-Question activity. Each group generates a question onto a piece of paper, wads the question into a ball and tosses it to the next group to answer, then they toss it back to the originator to evaluate.

Strategy 10. Formative Assessment: [Quiz on lesson 1](#)

## Unit Title \_\_\_\_\_

Strategy 11. GRASPS task: You are journalist for your school newspaper. Your assignment is to interview the new foreign exchange student from the target language culture. Since he/she cannot speak English, you must conduct your interview in the target language. Create a variety of questions using both information and yes/no questioning techniques. You must interview the exchange student and record his/her responses. Then write an article about the student in third person. (see Accommodations for extra tips)

G- To write an article about a foreign exchange student.

R- Journalist for a school newspaper

A- School students and staff

S- You are journalist for your school newspaper. Your assignment is to interview the new foreign exchange student from the target language culture. Since he/she cannot speak English, you must conduct your interview in the target language.

P- Article in newspaper

S- Create a variety of questions using both information and yes/no questioning techniques. You must interview the exchange student and record his/her responses. Then write an article about the student in third person.

**Lesson 2:** Describing extra-curricular activities and future events.

**Essential Question:** What is my high school experience? What is my high school like for students in other cultures?

**Background:** All material covered in lesson 1 and level 1 curriculum

Strategy 1. Use the “Say Something” strategy (Student partners work together to decide how far to read silently before stopping to “say something” that can be a summary, a question, or a connection. At that point, both students should say something. The process is repeated until the end of the text. Then, the whole class will meet to discuss the text.) Students read a culturally [authentic article](#) from a magazine about activities. Students highlight the sports/leisure activities they recognize and circle the cognates. Students and teacher compile a class vocabulary list from their results. Teacher adds other desired vocabulary.

Strategy 2. Sports/leisure vocabulary practice: collage, pictures/sentences, activities paragraph based on picture (differentiated activities – see Accommodations for more instructions)

Strategy 3. GRASPS task: You are either a coach or an advisor for a school club/sport. Your sport/club is in danger of being cut due to low enrollment. You must design a brochure in the target language for open house highlighting the benefits of your program. You must include vocabulary from this unit. [Rubric](#)

G- Persuade students to join your club/sport

R- coach/advisor

A- students

S- You are either a coach or an advisor for a school club/sport. Your sport/club is in danger of being cut due to low enrollment.

P- Brochure

S- Brochure must be persuasive and include vocabulary from this unit.

Strategy 4: Students will look through all the brochures and choose the one sport or club they would like to join and explain why verbally in the target language.

Strategy 5: Organize students into small groups to exchange brochures from the GRASPS task. Each group creates a set of questions in the target language for students to answer about the brochure or the sports or clubs. The students will then answer these questions as a group in the target language.

# Unit Title \_\_\_\_\_

Strategy 6. Review near future tense (to go + infinitive) by instruction, modeling, and guided practice then worksheet.

- Teacher writes several sentences on the board in target language. Some of the sentences are in present tense and others are in future tense.
- Students must identify sentences as either present or future tense. Students raise right hand if they think the sentence is present tense and left hand if they think the sentence is in the future tense.
- Students identify the common verb used each of the future tense sentences. Students also identify the other verb tense common in all future tense sentences. From their responses a general formula for creating future tense sentences is formed i.e. subject + form of the verb to go + infinitive
- Students are shown [pictures](#) of places and given a subject. For each picture students must create a future tense sentence describing what the subject is going to do at the indicated place. Students read their responses aloud.
- Students complete a [worksheet](#) on future tense.

Strategy 7. Dice Game

- Students are divided into pairs and given a die.
- Each number of the die corresponds to a subject pronoun (ie: 1. I 2. you (informal) 3. he 4. we 5. you (plural) 6. they) and an infinitive (ie: 1. to go 2. to eat 3. to make 4. to speak 5. to play 6. to be).
- One student is the recorder and the other is the die roller.
- 1<sup>st</sup> roll- number corresponds to subject pronoun.
- 2<sup>nd</sup> roll- number corresponds to infinitive.
- Students must use both subject pronoun and infinitive to create a sentence in the near future. Students must also include a predicate. Groups continue to roll die and make sentences until teacher says, "Stop!" The group with the most correctly formed sentences wins.

Strategy 8. Formative Assessment: [Formative Assessment - lesson 2.doc](#)

Strategy 9. Students complete a [Mi horario - graphic organizer.doc](#) on tomorrow's schedule. Based on their schedule, students write a paragraph in the target language using the future tense. Students then meet in groups and write an essay using the future tense in the target language comparing and contrasting their schedules.

## Resources & Teaching Tips

- **What tips to teachers of the unit can you offer about likely rough spots/student misunderstandings and performance weaknesses, and how to troubleshoot those issues?**

### Lesson 1

Background:

- [Required vocabulary from Level 1](#)
- [Review sheet](#) of vocabulary from Level 1
- [Study Guide](#) for Review test of material covered in Level 1
- [Review test of material covered in Level 1](#)

Strategy 1: [School Vocabulary Game](#)

Strategy 5:

- [Answer key](#) with examiner's comments
- [Script](#)

Strategy 7: [Present tense](#)

Strategy 8: [Adjective practice](#)

### Lesson 2

Strategy 1:

- [Sports Vocabulary Review](#)
- [Sports Vocabulary Review 2](#)
- [Hobbies](#)

Strategy 6: [notas - futuro inmediato.doc](#)

# Unit Title \_\_\_\_\_

**Accommodation/Differentiation ideas and tips** (This should include a list or description of ways that you will differentiate instruction according to students' needs. This can include any curricular adaptations that are needed to meet special needs students. Ex: using reading materials at varying readability levels, putting text materials on tape, using spelling or vocabulary lists at readiness levels of students, meeting with small groups to re-teach an idea or skill for struggling learners, or to extend the thinking or skills of advanced learners.

Lesson 1, Strategy 4: Instead of showing students flashcards you designed, you, the teacher, could break the kids into small groups or even have them work individually to create their own flashcards. This activity would be designed to help those low level students.

Lesson 1, Strategy 11: Instead of having the students type their interview and write it in the form of a newspaper article, they could present their interviews in front of the class. Another suggestion is to have the students incorporate technology by typing their articles, using Microsoft Publisher or another similar program, to produce realistic-looking newspaper columns.

Lesson 2, Strategy 2: This strategy is broken into three types of categories, depending on the level of the students (low, mid, high). Low: students create a collage of pictures of different sports and leisure activities, labeling the activities in the target language. Mid: students provide 8 pictures of sports and leisure activities and write a sentence about each one in the target language. High: students provide pictures of sports and leisure activities and write a paragraph about those activities in the target language.

## Technology Integration/Content Connections

- Find out what life is like at school in Spanish-speaking countries.  
[http://www.bbc.co.uk/schools/primaryspanish/learn\\_more/school/slideshow1.shtml](http://www.bbc.co.uk/schools/primaryspanish/learn_more/school/slideshow1.shtml)
- Lesson 1 Strategy 5:  
[http://www.bbc.co.uk/schools/gcsebitesize/spanish/listeningf/1\\_f\\_list\\_school\\_rev2.shtml](http://www.bbc.co.uk/schools/gcsebitesize/spanish/listeningf/1_f_list_school_rev2.shtml)
- Language Internet Activities: Click on the language desired on the left. Choose specific activities to review. Covers a variety of topics such as colors, numbers, adjectives, verbs, vocabulary, body, city life, school life, etc.  
<http://www.languagesonline.org.uk/>
- Check out the iEARN website. It is an educational website designed for teachers to interact with other teachers across the world. It also has many uses for students in your classes to create pen pals and even blog with other students. There is a fee for use of their program.  
[www.earn.org](http://www.earn.org)

## Delaware World Language Curriculum Unit Template

*Preface: This unit has been created as a model for teachers in their designing or redesigning of course curricula. It is by no means intended to be inclusive; rather it is meant to be a springboard for a teacher's thoughts and creativity. The information we have included represents one possibility for developing a unit based on the Delaware content standards and the Understanding by Design framework and philosophy.*

**Subject/Topic Area: World Languages**

**Grade Level(s): H2**

**Searchable Key Words: travel, vacations**

**Designed By: Jennifer Short**

**District: Red Clay**

**Time Frame: 4 weeks**

### **Brief Summary of Unit**

**This unit should be taught in Spanish 2 as Unit Two of study.**

**Through class discussion, web searches, readings of primary materials, and peer interactions, students will discover the cultural similarities and differences between traveling in the target language culture and in the United States. They will gain communication skills, will express opinions and preferences and will develop cultural perspectives of countries.**

### **Charter School Unit Modification**

#### **Guiding Questions**

1. Why was this model unit of instruction selected as part of your schools' curricular submission?

This unit teaches important concepts and reinforces vocabulary for travel in Spanish speaking countries.

2. What modifications have been made to the model unit of instruction to meet the specific needs of the student population your school serves?

No modifications will need to be made based on the student population.

3. What modifications have been made to the model unit of instruction that reflect the resources (human, time, building, technology etc.) available to your school?

No modifications will need to be made based on the resources available. The high school will have classrooms for students.

4. Describe any other modifications that have been made to the model unit of instruction that will assist in the curricular review for your school.

No other modification will need to be made to the unit.

## **Stage 1: Desired Results** (Determine What Students Will Know, Do and Understand)

### **Delaware World Language Content Standards**

#### **1.1 Interpersonal Communication**

Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Students exchange information about personal events, memorable experiences and other school subjects with peers, and/or members of the target cultures.

#### **1.2 Interpretive Communication**

Students comprehend brief, written messages and short personal notes on familiar topics such as family, school events and celebrations. Students understand the main idea contained in various media.

#### **1.3 Presentational Communication**

Students prepare simple stories or scaffolded paragraphs about personal experiences, or other school subjects to share with classmates or members of the target culture.

#### **2.1 Cultural Practices and Perspectives**

Students demonstrate the importance of following cultural expectations while participating in cultural practices.

#### **3.1 Connections to Other Disciplines**

Students demonstrate an understanding of the concepts learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, health and physical fitness and the performing arts.

#### **3.2 Access to Information**

Students read, listen to and talk about age-appropriate school content, folk tales, short stories, internet sites, poems and songs written for native speakers of the target language.

#### **4.1 Language Comparisons**

Students demonstrate an awareness of ways of expressing respect and communicating status differences in their own language and the language they are learning.

#### **4.2 Cultural Comparisons**

Students hypothesize the relationship between the products and perspectives in the cultures studied and compare and contrast them with their own.

#### **5.1 Transfer to Communities**

Students contact local agencies to secure information regarding products or practices of target-language cultures.

### **Big Idea**

#### **Travel**

### **Unit Enduring Understandings**

Travel connotes different meanings to people according to their needs, resources, and experiences.

### **Unit Essential Question(s)**

- How are my travel needs similar to and different from those from other cultures?
- What information do I need to know in order to plan a trip to a foreign country?
- What is my definition of a vacation and how does that differ from someone's from another culture?

## Knowledge & Skills

Students will know...

- airplane travel
- lodging
- direct and indirect object pronouns
- direction words
- the past tense of regular verbs as well as “ir,” “ser,” “hacer,” “ver,” and “dar.”
- Nature in Costa Rica

Students will be able to...

- identify different types of lodging
- identify different parts of the airport
- describe what their definition of a vacation is
- plan a vacation to a Spanish-speaking country
- compare and contrast cultural practices and perspectives
- make and answer questions in the target language
- decipher an authentic story in the target language
- listen and comprehend authentic dialogues in the target language

## Stage 2: Assessment Evidence (Design Assessments To Guide Instruction)

### Suggested Performance Task(s)

Essential Questions:

- How are my travel needs similar to and different from those from other cultures?
- What information do I need to know in order to plan a trip to a foreign country?
- What is my definition of a vacation and how does that differ from someone's from another culture?

### SUMMATIVE IPA

**Scenario:** You are planning a trip to a Spanish-speaking country for you and your family.

**Interpretive Task:** Write an email to a friend telling him/her all about your trip. The email must be in Spanish and must include as many details as possible – where you are vacationing, what you are doing, and how you feel. Check for all spelling, grammar, or vocabulary errors.

**Interpersonal Task:** You will role play a conversation with another classmate in Spanish. For extra credit, you may choose to turn this into a video skit with production value and props. You have a choice of topics: a) Customs officer and traveler; b) Travel agent and traveler. In choice a, the conversation will take place in the airport where the customs officer will ask questions about your luggage, any souvenirs, where you went, etc. In the second option, the conversation will take place in the travel agency or on the telephone where you will discuss preparations for your trip to a foreign country – what you need to do beforehand, what you will need to pack, where you will stay, what you will do, etc. Both conversations should last for

3 minutes and should be creative. The focus will be on vocabulary, grammar, tone, pronunciation, and eye contact.

**Presentational Task:** Design a brochure for your trip that looks professional and creative, with multiple resources. The brochure should provide information on the following elements of your trip: accommodations, your travel itinerary, activities as to what you and your family can do, local currency, local cuisine, and any travel or safety concerns.

## Rubrics/checklists for Performance Tasks

### Other Evidence

Ongoing formative assessments and observations.

### Student Self-Assessment and Reflection

Written Reflection:

Students will complete the “I can...” check-list at the end of the each lesson.

1. I can discuss travel preparations.
2. I can talk about things I do at the airport.
3. I can ask how to get around town.
4. I can use direct object pronouns.
5. I can use indirect object pronouns.
6. I can say where I went and what I did on vacation.
7. I can ask information questions.
8. I can talk about buying gifts and souvenirs.
9. I can use the preterit of regular –AR verbs.
10. I can use the preterit of irregular *ir, ser, hacer, ver* and *dar*.

## Stage 3: Learning Plan

(Design Learning Activities To Align with Goals and Assessments)

### Key learning events needed to achieve unit goals

#### Lessons in Model Resource Unit:

Lesson 1: Airport

Lesson 2: Lodging

Lesson 3: Direct and Indirect Object Pronouns

Lesson 4: Past Tense

#### Lesson 1: Airport

**Essential Question:** What information do I need to know in order to plan a trip to a foreign country?

**Background:** All Level 1 material plus Unit 1 material

Strategy 1: Present big theme and enduring understandings as well as the essential questions and objectives for the unit.

Strategy 2: Introduction to vocabulary.

- Show a video clip with the vocabulary words in clips to introduce the words. (the clip will come from the *Avancemos Level 2* DVD series)

- After the video the teacher will pass out a list of vocabulary the students need to know and review the words they learned from the video. [../travel 2/leccion 1, voc 1.doc](#)
- We will also discuss any words they already know.

Strategy 3: Reading comprehension

- Read several short paragraphs aloud in class from the *Avancemos Level 2* book on pages 37-38 to learn the definitions of the rest of the vocabulary.

Strategy 4: Verbal practice

- Show students clip art/pictures from the Internet of parts of the airport and have the students guess the Spanish word. [../travel 2/pics airplane travel.docx](#)

Strategy 5: Play Bingo with pictures of the airport.

Strategy 6: Independent work

- Students will complete a worksheet packet practicing their usage of the vocabulary. (the packet will come from the *Avancemos Level 2 Cuaderno A, B, and C* from Unidad 1, Leccion 1)

Strategy 7: Picture Scene

- Students will look at a picture depicting a scene from an airport and will create a mini-dialogue based on the scene. [../Documents/curriculum/422 AirportScenes.jpg](#)

Strategy 8: Formative Assessment

- Quiz on airport and air travel [../travel 2/air travel quiz.docx](#)

## Lesson 2: Lodging

**Essential Questions:** What information do I need to know in order to plan a trip to a foreign country? How are my travel needs similar to and different from those from other cultures?

**Background:** All Level I material plus everything covered in Unit I and Lesson 1

Strategy 1: Revisit the big theme and enduring understanding, as well as the essential questions for this lesson. Ask students where they stay when they travel. Ask them to list different types of accommodations on the board.

Strategy 2: Present students with a vocabulary list of words they need to know related to accommodations. They must work in pairs to define as many words as possible within a 7 minute time period. The winning team wins an incentive prize (maybe extra points).

Strategy 3: Reading comprehension

- Read some notes in English about types of hotels. (book *Mucho Gusto* pages 202-203)

Strategy 4: Reading comprehension

- Read about pensiones. (book *En Espanol II* pages 246-251)

Strategy 5: Reading comprehension

- Read a dialogue about a hotel and answer the questions that follow. (book *Mucho Gusto* page 201)

Strategy 6: Verbal and written practice

- Students look at pictures of different hotels, hostals, and pensiones and have to choose where they would rather stay and why (in Spanish). [../Documents/curriculum/hotel, hostel, pension.doc](#)

Strategy 7: Conversation

- Students must create a conversation pretending one person is checking in and one works in reception (in Spanish).

## Lesson 3: Direct and Indirect Object Pronouns

**Essential Questions:** How are my travel needs similar to and different from those from other cultures? What information do I need to know in order to plan a trip to a foreign country?

**Background:** All material covered in lessons 1 and 2

Strategy 1: Post sentences on the board related to travel and accommodations that are missing vocabulary words. Have students fill in the spaces with the relevant vocabulary words.

Strategy 2: Using those same sentences, ask for volunteers to locate the verb(s) in each sentence. Then ask them to find any direct objects. Most students may not know what a direct object is, so ask “What?” or “Who?” after each verb until each of those sentences has the verb(s) underlined and the direct object underlined twice. Now explain that direct objects occur after a transitive action verb and answer the questions, “who” or “what.” (Hopefully students have been exposed to this concept in Spanish I and this is just a review).

Strategy 3: Give each student an index card with a noun related to travel. They will be four corners of the room that will have signs for “lo,” “la,” “los,” and “las.” Each student must then tell you which direct object pronoun would best replace the noun on the card by standing with their card in the appropriate corner of the room.

Strategy 4: Independent practice

- Give students the worksheet on direct object pronouns and ask them to replace the underlined word with the best pronoun. <http://www.colby.edu/~bknelson/SLC/D01.php>

Strategy 5: Explanation

- Students must be taught where a direct object pronoun falls into a sentence. Use some examples on the board and again ask for student volunteers to find the verb, the direct object, replace it with a pronoun, and rewrite the sentence correctly. <http://www.drlemon.com/Grammar/directobjects.html>

Strategy 6: Guided Practice

- Using Dr. Lemon’s webpage, print out the worksheet and have students complete it as an in-class assignment. Show the work using an Elmo to demonstrate any needed corrections and have the students peer edit their papers/work.

Strategy 7: Human Sentences

- Create sentences using direct objects. Put one word each on a separate piece of copy paper. On pieces of colored construction paper, write the different direct object pronouns. Give a piece of white construction paper to each student. Have them stand in the front of the room. Nominate 2 students to organize them into a logical sentence, then ask each student to read his/her word aloud. Once everyone agrees on the sentence, ask another student to identify those students who represent the direct object of the sentence. Those students will be kicked out of the sentence (out of the family, I call it). That same student will replace them with the appropriate direct object pronoun. It is the job of the 2 directors to re-organize them and have the students read their cards again. Repeat. (I usually create at least 4 sentences, that get progressively longer and more difficult).

Strategy 8: Practice

- Students must create 6 questions using direct objects. They will turn in these questions and another person will respond to these questions replacing the direct objects with pronouns.

Strategy 9: Introduce Indirect Objects

- Have sample sentences about travel again on the board (perhaps they are the same or similar to the ones beforehand). Again ask student volunteers to underline the verb and underline twice the direct object. Now ask the students for whom you are doing these tasks. Is anyone getting anything out of it? Have them circle those people. Explain the definition of indirect object pronouns.

Strategy 10: Indirect Object Pronouns

- Introduce the students to the different pronouns. Remind them they have seen them before with the verb “gustar.”
- Give the students pictures of food and index cards with different indirect pronouns and ask them to form 3 sentences to talk about different foods a variety of people enjoy.

Strategy 11: Explanation

- On the SmartBoard, showcase the website for StudySpanish.com and read through the uses of indirect object pronouns with the students. Then, give them the opportunity to earn points and practice by asking for volunteers to complete the Basic Quiz. <http://studyspanish.com/practice/iopro1.htm>

Strategy 12: Independent Practice

- Print out the worksheet and allow students to work on it in class and then, in pairs, make any error corrections. An example can be done afterwards on the Elmo.

#### Strategy 13: 4 Corners

- Give each student an index card with a noun related to travel. There will be six areas of the room that will have signs for “me,” “te,” “le,” “nos,” “vos,” and “les.” Each student must then tell you which indirect object pronoun would best replace the noun on the card by standing with their card in the appropriate area of the room.

#### Strategy 14: Manipulatives

- Students will be put into pairs and will create sentences using cut up pieces of paper from an envelope. They will use these pieces of paper to form complete sentences. Once the teacher has checked each sentence, they will then have to decide which part of the sentence represents the indirect object and remove it. The next step will entail writing the correct pronoun on the back of one of the slips of paper and putting it back into the sentence in the correct location.

[../travel\\_2/manipulatives - indirect.docx](http://travel_2/manipulatives_indirect.docx)

#### Strategy 15: Formative Assessment

- Quiz on Direct and Indirect Object Pronouns [../travel\\_2/prueba - direct, indirect.docx](http://travel_2/prueba_direct_indirect.docx)

### **Lesson 4: Past tense**

**Essential Questions:** Why do people travel? How are my travel needs similar to and different from those from other cultures?

**Background:** All material covered in lessons 1, 2, and 3.

Strategy 1: Refer back to the Enduring Understanding and Essential Questions.

Strategy 2: Hand out a different index card to each student with a different verb. Ask the students if they can identify that verb or categorize it correctly in the preterit. I have a list of all of my categories on the board and I ask my students for their verb and number in Spanish. If they are correct, they write their verb on the board in the correct category, earn a participation point, and grab a new card; if not, they wait their turn and try again.

Strategy 3: After learning how many students are comfortable with the preterit, we are able to discern the appropriate level of instruction. I then show my Power Point presentation but only go through the immediate past and the regular –AR verbs, to begin. [../travel\\_2/EL PRETERITO.ppt](http://travel_2/EL_PRETERITO.ppt)

Strategy 4: We play a version of Hot Potato or “Patata Caliente” where I toss around a ball and yell out different verbs and different subjects and the recipient has to say the correct form or pass it to someone else. At this point, I do have the forms highlighted on my board or SmartBoard until the students are familiar with them.

Strategy 5: The teacher writes a story on the board in the present tense in Spanish. The students take turns volunteering to underline all the verbs. They must then change the verbs from the present to the past. (I usually do this in such a way as to use enough verbs for every student and to try to use all or most of their names). I then ask them to add at least one sentence to the story.

#### Strategy 6: Independent Practice

- The students complete worksheets from the Cuaderno pages 27-28 that follow their text *Avancemos Level 2 Unit 1 Leccion 2*.

[http://my.hrw.com/apps/alchemy/editors/display.jsp?cid=av1012cn\\_1\\_gram\\_a\\_27](http://my.hrw.com/apps/alchemy/editors/display.jsp?cid=av1012cn_1_gram_a_27)

#### Strategy 7: Notecards

- I return to the notecards to see how many students can find the “gemelos” as well as the “primos.”
- Once they are discovered, we discuss what makes them different or unique. I re-introduce the Power Point and we continue with those sections.

#### Strategy 8: Reading Comprehension

- The students work with a partner to read the paragraph and to see which verb fits and how to change it to make sense. <http://my.hrw.com/tabnav/controller.jsp?isbn=0547318685>

#### Strategy 9: Listening Comprehension

- I show my students the music video “La historia de Juan” by Juanes. Before I play anything, I ask them just to watch the video and listen to the music and the lyrics. After the song finishes, we discuss the tone of the music, the sights in the video, and any symbolism.
- I then give them a worksheet with the lyrics but with some missing words. I replay the song twice more and they must complete the worksheet filling in the missing words (all in the past).
- Afterwards, we discuss what the moral of the song was, why it was told in the past, and relate it to our experiences.
- The students are asked to finish the exercise with an artistic representation of their emotional response, whether that be in prose, poetry, artistic drawing, or song.

#### Strategy 10: Conjugation Relay

- Students are divided into 3 teams. There is a line of scrimmage and a space for each team to write on the board. When the whistle sounds, one teammate at a time, must write the “yo” form of the given verb correctly in the past tense. When he/she passes the line of scrimmage, the next teammate may go to write the next form, and so on and so on. The first team to correctly give all 6 forms in the preterit in a way that is legible wins a point. I do this for about 15 minutes as a way to review all verb forms.

#### Strategy 11: Summer/weekend plans

- Working in pairs, each group must create 8 questions in the past asking another group about what they did the past weekend or past summer. When they finish, they will switch with the other group and answer the questions.

#### Strategy 12: Formative Assessment

- Quiz on the past tense [lesson 4 - quiz on pretérito regulares.doc](#)

## Resources & Teaching Tips

- Lesson 1: Reinforcement
- Lesson 2: Reinforcement
- Lesson 3: Reinforcement
- Lesson 4: Reinforcement
  - I categorize the preterit into 9 different categories
    - 1. Regular verbs
    - 2. Yo irregulars
    - 3. 3<sup>rd</sup> person irregulars
    - 4. Gemelos / twins (ser, ir)
    - 5. Primos / no accentos (ver, dar)
    - 6. UV stems
    - 7. U stems
    - 8. I stems
    - 9. J stems

#### **Accommodation/Differentiation ideas and tips**

- 1) Refer to resources for extra practice.
- 2) Interpretive Task for the IPA: To make this more challenging, ask that the email be conducted in the preterit tense and be sent to a Spanish-speaking pen pal describing everything that happened on the trip.
- 3) Allow the Presentational Task for the IPA to be developed with a partner. Instead of asking for a professional-looking brochure, allow the students to create their brochure using a variety of formats: Publisher, Power Point, Microsoft Word, Construction Paper, Poster Board, a Collage.
- 4) Lesson 3, Strategy 8: Allow students to work in pairs. Students can post their questions on a web page and their peer(s) can respond as they would to a blog.

## Technology Integration/Content Connections

Incorporated throughout lesson and as extra resources.

## Delaware Model Unit Gallery Template

This unit has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model unit has undergone a rigorous peer review and jurying process to ensure alignment to selected Delaware Content Standards.

**Unit Title:** Lines and Texture

**Designed by:** Diana Rossi

**District:** Innovative Schools

**Content Area:** Art

**Grade Level(s):** 9-12

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### Summary of Unit

Students will learn about how to incorporate lines into designs. Students will understand implied lines, with simulated texture.

## Stage 1 – Desired Results

What students will know, do, and understand

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### Delaware Content Standards

- 1.1 select and use different media, techniques and processes that are used to create works of art
- 1.2 use selected two-dimensional and three-dimensional media to communicate ideas
- 1.4 demonstrate how a single medium or technique can be used to create multiple effects in works of art
- 1.7 describe how media and techniques are used to create two-dimensional and three dimensional works of art
- 2.1 identify the elements of art
- 2.2 select and use the elements of art in works of art
- 2.3 identify the principles of design
- 2.5 evaluate works of art in terms of structure and function
- 2.9 plan, design and execute multiple solutions to challenging visual arts problems
- 4.7 describe how the visual arts influence history and cultures
- 5.4 analyze works of art to speculate why they were create

### Big Idea(s)

Perspective

Movement

Contrast

### **Unit Enduring Understanding(s)**

Artists must understand media, techniques and process as tools to communicate

Artists consider multiple approaches to visual problems

Form and function may or may not be related one to the other

### **Unit Essential Questions(s)**

To what extent can media be manipulated using a variety of techniques and processes?

How can lines express emotion?

Why is value an important part of the line design?

To what extent does good design integrate form with function?

### **Knowledge and Skills**

#### **Students will know...**

- Vocabulary terms:        perspective  
                                      contrast  
                                      Value with lines  
                                      Texture  
                                      Movement  
                                      Rhythm
- how to create a design from lines
- what it means to create movement from lines
- how to use perspective
- 2 point perspective
- horizon line
- vanishing point
- implied lines
- different types of lines
- who Jackson Pollock, Willem DeKooning, and Piet Mondrian are

#### **Students will be able to...**

- create a line drawing using different types of lines, using charcoal, pencil and black markers.
- create a piece consisting of contrast, movement and rhythm.
- create balance between their lights and darks.
- create 2-point perspective buildings drawing using all implied lines to imply texture.
- evaluate and discuss their pieces and pieces of their peers using a critique protocol and rubric.
- analyze artist's work and thoughts on why they created their pieces and their use of lines.

## Stage 2 – Assessment Evidence

Evidence that will be collected to determine whether or not Desired Results are achieved

### Suggested Performance/Transfer Task(s)

-Students will be working on a line pattern design. They will have a 9x12 piece paper, and worksheets on different types of lines. The designs will create movement and value with black and white.

-Students will be working with 9x12 paper and working with 2 point perspective. Students will practice in their sketchbooks creating two point perspective buildings.

Once completed they will work on a cityscape using only two point and using line designs to create texture and implied lines.

### Rubric

Drawing Assessment Rubric					
<b>Student Name:</b>					
Circle the number in pencil that best shows how well you feel that you completed that criterion for the assignment.	Excellent	Good	Average	Needs Improvement	Teacher's Rating
Criteria 1 – Student drew from observation and drew with correct proportions and balance	10	9 – 8	7	6 or less	
Criteria 2 – Accurate line drawing of still life objects	10	9 – 8	7	6 or less	
Criteria 3 – Student understands the concept of value in art, and can use a pencil to express a full range of values from black to light gray. Completed drawing shows that range.	10	9 – 8	7	6 or less	
Criteria 4 – Effort: took time to develop idea & complete project? (Didn't rush.) Good use of class time?	10	9 – 8	7	6 or less	
Criteria 5 – Craftsmanship – Neat, clean & complete? Skillful use of the art tools & media?	10	9 – 8	7	6 or less	
Total: 50 x2 (possible points) Grade:					Teacher Total
Student Comments:					
Teacher Comments:					

### **Other Evidence**

- oral participation in class discussions

-Students will journal daily with the following suggestions for sketches and the only instruction that the work must be solely created through the use of lines:

- \* Illustrate your favorite poem
- \* Draw the contents of a trash can
- \* Drawing of a house plant (real or artificial)
- \* Draw an object with a surface texture.
- \* Draw tools used in certain professions
- \* Draw a tennis shoe
- \* draw a grouping of leaves
- \* Draw something you might find in a department store display
- \* Draw a large jar and fill it up with something (candy, toys, rock, etc)
- \* Design a school desk
- \* Draw your favorite snack food
- \* Draw an object melting
- \* Draw a bowl of fruit, shade it.
- \* Draw hands holding something
- \* Draw a mechanical object
- \* word picture: select a word that bring to mind a mental picture, draw the word as the shape of the object, such as the word apple in the shape of an apple, or apples spelling out the word.
- \* Draw popcorn
- \* Keyhole: what would you see through a key hole

### **Student Self-Assessment and Reflection**

- Pre-test
- Post test
- Critique, written

## **Stage 3 – Learning Plan**

(Design learning activities to align with Stage 1 and Stage 2 expectations)

### **Key learning events needed to achieve unit goals**

- What is a line?
- How do lines create movement?
- Students will learn what lines are. Students will learn how lines create movement.
- Students will create a chart of lines in their sketchbooks so they have an understanding of the different types of lines.
- Students will learn what Zentangle means.
- Students will look at examples of different types of Zentangle patterns in order for them to create their own Zentangle.
- Students will create a piece using the lines worksheet, and the zentangle patterns.
- Students will learn the concept of vanishing point, horizon line and perspective.
- Students will complete exercises in their sketchbooks on perspective.
- Students will create a drawing in two-point perspective. Once students have done the drawing, they will go back and imply windows and doors by using only lines

## Resources and Teaching Tips

- DeKooning: A Retrospective, by Jim Coddington, [John Elderfield](#) and Willem de Kooning (Hardcover - Sep 30, 2011)
- Jackson Pollock, by Ellen Landua April 2010
- Picasso Line drawings and prints (Dover Fine art, History of Art) by Pablo Picasso 1982
- Line and Shading in drawing, (Drawing Academy) by Gabriel Martin I Roig (2005)
- Basic Zentangle
- Zentangle 2
- Zentangle 3
- Perspective drawing handbook, (Dover art instruction) by Joseph D'Amelio (May 2004)
- Perspective drawing for beginners (Len a Doust)

## Differentiation

- Change the size of the paper
- Along for longer time on project, provide assistance when requested
- Allow students to look at different patterns and use those patterns to create their design.

## Design Principles for Unit Development

At least one of the design principles below is embedded within unit design

- **International Education** - the ability to appreciate the richness of our own cultural heritage and that of other cultures in to provide cross-cultural communicative competence.
- **Universal Design for Learning** - the ability to provide multiple means of representation, expression and engagement to give learners various ways to acquire and demonstrate knowledge.
- **21<sup>st</sup> Century Learning** – the ability of to use skills, resources, & tools to meet the demands of the global community and tomorrow’s workplace. (1) Inquire, think critically, and gain knowledge, (2) Draw conclusions make informed decisions, apply knowledge to new situations, and create new knowledge, (3) Share knowledge and participate ethically and productively as members of our democratic society, (4) Pursue personal and aesthetic growth.(AASL,2007)

(Briefly explain how design principle(s) are embedded within the unit design.)

Universal Design for learning: Students will learn balance between the artist’s work and their own work. Students will examples of other’s work, and other ways of solving problems and finding a different solution.

## Technology Integration

The ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information

Projector

Elmo

Demonstration from the Elmo onto the board so everyone can see demonstration

Laptop for images

***Delaware Model Unit***  
***Design Art – The Golden Mean to an End***

**Unit Title: The Golden Mean to an End**  
**Designed by: Don Golacinski**

**District: Sussex Technical School District**  
**Content Area: Design Art**

**Grade Levels: 9–12**  
**Time Frame: 8 to 10 Classes**

**Searchable Key Words:** Golden Mean, Golden Ratio, Golden Spiral, Phi, The Divine Proportion, Fibonacci Numbers, Parthenon, Vitruvian Man

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**Summary of Unit**

This unit of instruction is designed to guide students through the interesting applications of the Golden Mean by uncovering the geometry inherent in nature and apply these principles to design and creation of art. We will explore how artists use this Golden Ratio as a means of organizing a work of art to create masterpieces throughout history. Students will be introduced to the mathematical properties of the Golden Mean and select patterns from nature to inspire original compositions. Students will begin by searching how the Golden Ratio appears in everyday objects with which they come in contact. The unit will explore examples found in nature and how the ancient Egyptians, the Mayans, and Greeks incorporated it into their art, architecture, and designs. Lessons and activities within the unit are adapted from work by Dr. David L. Narain (2001), <http://cuip.uchicago.edu/~dlnarain/golden/>, of Chicago Public Schools and Grace Hall, <http://www.princetonol.com/groups/iad/lessons/high/Grace-golden.htm> (source is Princeton Online), of Wilkes Central High School, Wilkesboro, North Carolina.

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**Charter School Unit Modification**

**Guiding Questions**

1. Why was this model unit of **instruction selected as part of your schools'** curricular submission?

This unit is posted on the DDOE web site as an exemplary unit of instruction. It teaches fundamental concepts about art, geometry, and shapes. These are critical concepts in drawing.

2. What modifications have been made to the model unit of instruction to meet the specific needs of the student population your school serves?

No modifications will need to be made based on the student population.

3. What modifications have been made to the model unit of instruction that reflect the resources (human, time, building, technology etc.) available to your school?

No modifications will need to be made based on the resources available. A full art room will be available for the art program.

4. Describe any other modifications that have been made to the model unit of instruction that will assist in the curricular review for your school.

No other modification will need to be made to the unit.

## **Stage 1 – Desired Results** (What students will know, do, and understand)

### **Delaware Content Standards**

- Include those addressed in Stage 3 and assessed in Stage 2.

### **Primary Standards and PLEs**

#### ***Visual Art***

- Standard 1: Understanding and applying media, techniques and process.
  - 1.1 – Select and use different media, technologies and processes that are used to create works of art.
  - 1.2 – Use selected two-dimensional and three-dimensional media to communicate ideas.
- Standard 2: Using knowledge of structures and functions.
  - 2.3 – Identify the principles of design.
  - 2.5 – Evaluate works of art in terms of structure and function.
  - 2.6 – Analyze the principles of design.
  - 2.7 – Select and use the principles of design in a work of art.
  - 2.9 – Plan, design and execute multiple solutions to challenging visual art problems.
- Standard 3: Choosing and evaluating a range of subject matter, symbols and ideas.
  - 3.2 – Integrate a variety of sources for subject matter, symbols and/or ideas which communicate an intended meaning in a work of art.

### **Secondary Standards and PLEs**

#### ***Visual Art Standards and PLEs***

- Standard 4: Understanding the visual arts in relation to history and cultures – 4.1, 4.2, 4.3, 4.4, 4.5.
- Standard 5: Reflecting upon and assessing the characteristics and merits of their works of others – 5.2, 5.3.
- Standard 6: Making connections between visual arts and other disciplines – 6.3.

#### ***English Language Arts Standards and GLEs***

- Standard 1: Use written and oral English appropriate for various purposes and audiences.
  - 1.3 (9–12) – Writers will produce examples that illustrate the following discourse classifications: by the completion of the grade, writers will be able to write persuasive, informative and expressive pieces.

### **Mathematics Standards and GLEs**

- Standard 7: Communication (Grades 9-12) - Students will be able to organize and consolidate their mathematical thinking through communication.
- Standard 8: Connections (Grades 9-12) - Students will be able to recognize and use connections among mathematical ideas; Students will be able to recognize and apply mathematics in contexts outside of mathematics.

### **History Standards and GLEs**

- Standard 1: Grades 9-12 - Students will analyze historical materials to trace the development of an idea or trend across space or over a prolonged period of time in order to explain patterns of historical continuity and change.
- Standard 2: Grades 9-12 - Students will develop and implement effective research strategies for investigating a given historical topic.

### **Big Idea**

- Transferable core concepts, principles, theories, and processes from the Content Standards.
- Design is inherent in nature.

### **Unit Enduring Understandings**

- Full-sentence, important statements, or generalizations that specify what students should understand from the Big Ideas(s) and/or Content Standards and that are transferable to new situations.

Students will understand that:

- Design is a plan and process.
- Artists make thoughtful choices in creating works of art.
- Form and function may or may not be related to one another.
- Art is a universal symbol system that transcends language barriers.
- Timeless works of art are deemed important for a variety of reasons.
- Reflection, assessment, and refinement are key steps in the process of creating art.
- There is a relationship between mathematics and visual art.
- Design is thinking creatively.

### **Unit Essential Questions**

- Open-ended questions designed to guide student inquiry and learning.
- How is design expressed in the natural and human-made environment?
- To what extent does good design integrate form with function?
- What makes a great work of art?
- How might science and art be related?

### **Knowledge and Skills**

- Needed to meet Content Standards addressed in Stage 3 and assessed in Stage 2.

#### **Students will know...**

- The Golden Mean as a means of organizing a work of art.
- How artists have used the Golden Mean to create masterpieces throughout history.
- Art vocabulary: Golden Mean, Golden Ratio, Golden Spiral, Phi, The Divine Proportion, Fibonacci Numbers, Parthenon, Vitruvian Man.
- Historic information about art relating to the Golden Mean.

**Students will be able to...**

- Compare, analyze, and discuss works of art.
- Design and complete compositions based upon the Golden Mean.
- Organize visual information.
- Use technology to locate and access resources.
- Talk about and critique their personal work.
- Identify works of art that illustrate the Golden Mean.

## Stage 2 – Assessment Evidence

(Evidence that will be collected to determine whether or not Desired Results are achieved)

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### Suggested Performance/Transfer Tasks

- Performance/transfer tasks as evidence of student proficiency.

An effective assessment for ALL students should be designed to include:

- Complex, real-world, authentic applications.
- Assessment(s) for student understanding of the Stage 1 elements (Enduring Understandings, Essential Questions, Big Ideas) found in the Content Standards.
- Demonstration of high-level thinking with one or more facets of understanding (e.g., explain, interpret, apply, empathize, have perspective, self-knowledge).

### Performance Task #1

#### ***Designing and Creating a Work of Art Based Upon the Golden Mean***

<http://www.princetonol.com/groups/iad/lessons/high/Grace-golden.htm> (work created by Grace Hall, Wilkes Central High School in Wilkesboro, North Carolina; source is Princeton Online)

Students will analyze and compare examples in nature with artworks created by man then demonstrate properties of the Golden Mean. Students will use information from the analysis to generate ideas to design a composition using the Golden Mean and inspired by nature. These concepts will carry over to a series of drawings exploring how the Golden Mean is used in figure drawing and portraiture.

We have examined how geometry and math are related to design. These mathematical properties appear throughout nature. We will design a composition based upon the Golden Mean and inspired by a pattern from nature. This work should include the following guidelines:

- Students will choose a pattern from nature that is created through the phenomenon of the Golden Mean such as the pattern in a Nautilus Shell or the pattern from the seedpod of a sunflower to inspire an original design.
- Students will use the layouts provided on the transparencies to create an original work of art for the composition. The solutions to this problem are infinite.
- Show students books and magazines with patterns from nature and suggest ways they could use them. Allow them to use the Internet to further research natural patterns.
- Have students select a background color for the entire painting and paint that color within the masking taped area, overlapping enough to create a straight edge when the tape is removed.
- Using the Golden Ratio pattern that they chose, they must determine what part of the design will be the center of interest and place it in the section of the pattern of the Golden Ratio.
- Students will use chalk or pencil to draw the composition.
- Upon the due date, conclude the lesson with a critique using the rubric as a foundation for the discussion.
- Allow students to make changes to their work based on suggestions during the critique before grading or displaying the work.

## Rubrics

- Scoring guide to evaluate performance/transfer tasks used as evidence of student proficiency.

An effective scoring guide should:

- Measure what is appropriate for the Content Standard that is assessed.
- Provide opportunities for differentiation of the performance/transfer tasks used as evidence of student proficiency.

### *Art Production* *Rubric for the Golden Mean Project*

Student Name \_\_\_\_\_ Section \_\_\_\_\_ Date \_\_\_\_\_

	<b>Consistently Evident</b>	<b>Evident</b>	<b>Somewhat Evident</b>	<b>Not Evident</b>		
<b>CATEGORY</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>Your Score</b>	<b>Teacher Score</b>
Design is original	Student has taken the technique being studied and applied it in a way that is his/her own. The <b>student's personality/</b> voice comes through.	Student has taken the technique being studied and has used limited personal experience.	There is little evidence of creativity, but the student has finished the assignment.	Student has not made much attempt to meet the requirements of the assignment.		
Design inspired by a pattern from nature	Design reflects specific patterns from nature.	Design shows a general pattern.	Design shows little use of pattern in nature.	Design does not use a pattern from nature.		
Composition demonstrates knowledge of space as an element of design	Student applies design principles such as unity, space, balance, movement with great skill.	Student applies design principles such as unity, space, balance, movement with some skill.	Student applies little design principles in unskillful manner.	There is little to no design principles evident in <b>student's work.</b>		
Technical craftsmanship	Artwork is clean, neat, and well taken care of. Student has taken pride in appearance of the overall composition.	Artwork is presentable. Student needs to spend a little more time polishing final results.	Artwork appears unorganized. Student appears to have hurried to complete it.	Artwork is sloppy, torn, mishandled. Student did not care about his/her artwork.		
Project completed in a timely manner	Class time was used wisely. Much time and effort went into planning and design of drawing.	Class time was used well. Student could have put extra time and effort in.	Class time was not always used well and put in no additional effort.	Class time was not used well and student put in zero effort.		

Student Comments:

Total \_\_\_\_\_

Final Score/Grade \_\_\_\_\_

Teacher Comments:

## Other Evidence

- Varied evidence that checks for understanding (e.g., tests, quizzes, prompts, student work samples, observations, and supplements the evidence provided by the task).
- Portfolio reviews.
- Written responses to Web Quest about historical uses of Golden Mean.
- Artistic process—teacher observation of technique, work habits, and procedures.
- Thumbnail sketches.
- Worksheets on the Greek Golden Face, constructing a Golden Spiral and Golden Rectangle.
- The Golden Ratio quiz.
- Class discussion—description on the Golden Ratio found in everyday objects.

## Student Self-Assessment and Reflection

- Opportunities for self-monitoring learning ( e.g., reflection journals, learning logs, pre- and post-tests, self-editing—based on ongoing formative assessments).
- Student self-critique of project defending decisions made about media and composition. During critique, students will offer suggestions about work.
- Complete the Group Participation Rubric.
- Journal entries – Students will **keep “artist’s statements” as a part of journaling.**
- Student comments on entry of rubrics. All rubrics include student self-evaluation.

## *The Golden Ratio Quiz*

**Please use the text to demonstrate your understanding of the Golden Ratio.**

1. What is the Golden Ratio to three decimal places? Answer: \_\_\_\_\_
2. What are the first ten integers in the Fibonacci sequence? \_\_\_\_\_
3. Name an everyday object that exhibits the Golden Ratio. Please explain.  
\_\_\_\_\_
4. Name a building that exhibits the Golden Ratio in its construction.  
\_\_\_\_\_
5. How does the Golden Ratio appear in the building you named?  
\_\_\_\_\_
6. Name a painting by Leonardo da Vinci that exhibits the Golden Ratio.  
\_\_\_\_\_
7. Describe how the Golden Ratio appears in the painting you named?  
\_\_\_\_\_
8. Name a place where the Golden Spiral appears in nature.  
\_\_\_\_\_
9. How does the Golden Ratio appear in the object you just named? Please explain.  
\_\_\_\_\_
10. In your personal opinion, why do you think the Golden Ratio appears in so many places, both naturally and otherwise? Please explain your thinking.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Stage 3 – Learning Plan

(Design learning activities to align with Stage 1 and Stage 2 expectations)

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### Key Learning Events Needed to Achieve Unit Goals

- Instructional activities and learning experiences needed to align with Stage 1 and Stage 2 expectations.

Include these instructional elements when designing an effective and engaging learning plan for ALL students:

- Align with expectations of Stage 1 and Stage 2
- Scaffold in order to acquire information, construct meaning, and practice transfer of understanding
- Include a wide range of research-based, effective, and engaging strategies
- Differentiate and personalize content, process, and product for diverse learners
- Provide ongoing opportunities for self-monitoring and self-evaluation

### Lesson One – Discovering the Golden Mean

- <http://cuip.uchicago.edu/~dlnarain/golden/activity1.htm> (work created by Dr. David L. Narain of Chicago Public Schools, 2001)

Students will use the Internet to discover how the Golden Mean appears in everyday objects. They will move on to examining different works of art and finding the Golden Means imbedded within them. They will then use a search engine to find different Leonardo da Vinci masterpieces, download them, and dissect them to discover how he incorporated the Golden Mean into his work. Students will also construct their own Golden Rectangles and Golden Spirals. They will then examine the Golden Mean in nature. Finally, they will examine the faces of different celebrities to see if there is a connection between the Golden Mean and human attraction. Those who are more artistically inclined may choose to sketch a portrait that exhibits Golden Mean characteristics.

Schedule – These four activities will occur over 6 to 7 (90-minute) periods.

#### **Preparations:**

1. Pre-assess students' understanding of the Golden Mean using examples in the room.
2. Clearly identify the goals of the unit of instruction including the Big Idea, Enduring Understandings, and Essential Questions as well as the criteria for evaluation.
3. Outline expectations for journaling and self-assessment.
4. Collect tools needed for activities for list.
5. Cite examples of Golden Mean located in classroom.
6. Hand out instruction plan for the five activities. Review the Golden Ratio site and assign teams of three students to computers.

#### **Procedure:**

##### **Activity One – The Golden Mean in Everyday Objects**

1. Begin by handing out measuring tools.
2. Discuss the Fibonacci number and its origin. Review how the Egyptians, Mayans, and Greeks discovered the Golden Means.
3. On board, show the basic rectangles. Which one is more appealing?
4. Have teams visit website in Activity One.
5. Using tools have students measure the three rectangles and answer on computer which is more appealing.
6. Using suggestions measure and enter ratio in journal.

### *Activity Two – The Golden Mean in Art*

1. Have students examine Leonardo da Vinci's works.
2. Have them Google his works.

List of paintings to look for:

- *The Annunciation*
- *Madonna with Child and Saints*
- *The Mona Lisa*
- *St. Jerome*

If you are having difficulty finding the images, try a search using the words "da Vinci" and "art gallery" together or narrow your search using "advanced search."

- Directions for finding evidence of the Golden Ratio in each painting:

***The Annunciation*** – Using the left side of the painting as a side, create a square on the left of the painting by inserting a vertical line. Notice that you have created a square and a rectangle. The rectangle turns out to be a Golden Rectangle, of course. Also, draw in a horizontal line that is 61.8% of the way down the painting (.618 – the inverse of the Golden Ratio). Draw another line that is 61.8% of the way up the painting. Try again with vertical lines that are 61.8% of the way across both from left to right and from right to left. You should now have four lines drawn across the painting. Notice that these lines intersect important parts of the painting, such as the angel, the woman, etc. Coincidence? I think not!

***Madonna with Child and Saints*** – Draw in the four lines that are 61.8% of the way from each edge of the painting. These lines should mark off important parts of the painting, such as the angels and the baby Jesus in the center.

***The Mona Lisa*** – Measure the length and the width of the painting itself. The ratio is, of course, Golden. Draw a rectangle around Mona's face (from the top of the forehead to the base of the chin, and from left cheek to right cheek) and notice that this, too, is a Golden rectangle.

***St. Jerome*** – Draw a rectangle around St. Jerome. Conveniently, he just fits inside a Golden rectangle. What is the significance of this?

**Conclusions** – Leonardo da Vinci's talent as an artist may well have been outweighed by his talents as a mathematician. He incorporated geometry into many of his paintings, with the Golden Ratio being just one of his many mathematical tools. Why do you think he used it so much? Experts agree that he probably thought that Golden measurements made his paintings more attractive. Maybe he was just a little too obsessed with perfection. However, he was not the only one to use Golden properties in his work.

### *Activity Three – Constructing a Golden Rectangle*

1. You will need a piece of paper, a pencil, and a protractor to complete this activity.
2. Teams will visit: <http://cuip.uchicago.edu/~dlnarain/golden/activity4.htm>.
3. Follow instruction to create a Golden Rectangle.

### *Activity Four – The Perfect Face*

1. Have teams visit: <http://cuip.uchicago.edu/~dlnarain/golden/activity8.htm>.
2. Do these faces seem attractive to you? Many people seem to think so, but why? Is there something specific in each of their faces that attracts us to them, or is our attraction governed by one of Nature's rules? Does this have anything to do with the Golden Ratio? I think you already know the answer to that question. Let's try to analyze these faces to see if the Golden Ratio is present or not.

3. Choose a different famous face, then go to Lycos Multimedia and do a search on your **person's full name**. **Be sure to click on "Pictures" as a search criterion**. **When you find the image you want**, click on it to make it larger and then save it to your computer. Click on any of the images above to get a larger version. You may print this picture if you like.
4. Here is how we are going to conduct our search for the Golden Ratio: we will measure **certain aspects of each person's face**. **Then we will** compare their ratios. We will need the following measurements, to the nearest tenth of a centimeter:
  - a = Top-of-head to chin = \_\_\_\_\_ cm
  - b = Top-of-head to pupil = \_\_\_\_\_cm
  - c = Pupil to nose tip = \_\_\_\_\_ cm
  - d = Pupil to lip = \_\_\_\_\_ cm
  - e = Width of nose = \_\_\_\_\_ cm
  - f = Outside distance between eyes = \_\_\_\_\_ cm
  - g = Width of head = \_\_\_\_\_cm
  - h = Hairline to Pupil = \_\_\_\_\_ cm
  - i = Nose tip to chin = \_\_\_\_\_ cm
  - j = Lips to chin = \_\_\_\_\_ cm
  - k = Length of lips = \_\_\_\_\_ cm
  - l = Nose tip to lips = \_\_\_\_\_ cm
5. Now, find the following ratios:
  - a/g = \_\_\_\_\_ cm
  - b/d = \_\_\_\_\_ cm
  - i/j = \_\_\_\_\_ cm
  - i/c = \_\_\_\_\_ cm
  - e/l = \_\_\_\_\_ cm
  - f/h = \_\_\_\_\_ cm
  - k/e = \_\_\_\_\_ cm
6. Did any of these ratios come close to being Golden? If not, then maybe this face is not so perfect after all. Of the face above, who has **the most "Golden" one**? **Try finding a face that you find attractive and see how Golden it is.**

## **Lesson Two – The Golden Mean to an End**

<http://www.princetonol.com/groups/iad/lessons/high/Grace-golden.htm> (work created by Grace Hall, Wilkes Central High School in Wilkesboro, North Carolina; source is Princeton Online)

### **Schedule**

This lesson may extend over multiple class periods.

### **Preparations:**

1. Download the PowerPoint Presentation, review it, and research the topic to become familiar with how the Golden Mean connects with art.
2. Collect materials needed from the list above.
3. Make transparencies with the four different styles of the Golden Mean by either tracing them on transparencies or by using a copy machine.

**Procedure:**

1. Begin by posing the first essential question for the class and discuss the ideas they present. Conclude by sharing the theory of the Golden Mean with students.
2. Use the PowerPoint Presentation to instruct students on the background of the Golden Mean.
3. The presentation concludes with the activity, including the rubric, that will be used to assess the final product.
4. Begin the activity.
5. Set a due date, depending on the class, and provide students one to two weeks to complete the unit.
6. Conclude with a group critique discussing issues included in the rubric.
7. Allow students to revise if necessary.
8. Display the artwork for the class or the school including a brief description of the goal of the assignment.

**Activity:**

1. In this assignment, students will choose a pattern from nature which is created through the phenomenon of the Golden Mean, such as the pattern in a Nautilus Shell or the pattern from the seedpod of a sunflower to inspire an original design.
2. Students will use the layouts provided on the transparencies to create an original work of art for the composition. The solutions to this problem are infinite.
3. Show students books and magazine models with patterns from nature and suggest ways they might use them. Allow them to use the Internet to further research natural patterns.
4. Demonstrate how students are to tape down their canvas paper to leave an even white border around the edge of the paper.
5. Have students select a background color for the entire painting and paint that color within the masking taped area, overlapping enough to create a straight edge when the tape is removed.
6. Demonstrate using the overhead projector to project one of the Golden Mean transparencies over the background and trace it in chalk over the background.
7. Using the Golden Ratio pattern that they chose, they must determine what part of the design will be the center of interest and place it in the section of the pattern of the Golden Ratio.
8. Students will use chalk or pencil to draw in the composition.
9. If students have not used acrylic paint before, a discussion of the nature, care, and cleaning of acrylics should be discussed, including the fact that acrylics dry fast and that they will harden in the brushes and at the bottom of the sink. Acrylics may be used transparently by adding an acrylic medium or water. Alternately, by adding gesso they may also become more opaque. Acrylics will not come out of clothes unless they are removed while still wet and that is not guaranteed. Acrylics can be covered with plastic wrap in order to keep them moist for the next day.
  - a. Instruct students on the importance of good craftsmanship and technical accuracy.
  - b. Circulate to be sure students understand the concept and are using the paints appropriately.
  - c. When the paintings are finished, have students sign their work in one of the lower corners of the painting and carefully remove the masking tape to reveal the white border around the painting.

- d. Upon the due date, conclude the lesson with a critique using the rubric as a foundation for the discussion.
- e. Allow students to make changes to their work based on suggestions during the critique before grading or displaying the work.

### Resources and Teaching Tips

- A variety of resources are included (texts, print, media, web links).
- Help in identifying and correcting student misunderstandings and weaknesses.

### Primary Resources:

- Work by Dr. David L. Narain of Chicago Public Schools: <http://cuip.uchicago.edu/~dlnarain/golden/>
- Work by Grace Hall of Wilkes Central High School in Wilkesboro, North Carolina (source is Princeton Online): <http://www.princetonol.com/groups/iad/lessons/high/Grace-golden.htm>

### Additional Resources:

- The Golden Webquest: [http://members.tripod.com/mropfer/the\\_golden\\_webquest.htm](http://members.tripod.com/mropfer/the_golden_webquest.htm)
- The Golden Ratio Activity: <http://cuip.uchicago.edu/~dlnarain/golden/activity>
- The Golden Section: <http://goldennumber.net/goldsect.htm>
- Golden Ratio Activity: [http://www.markwahl.com/golden\\_ratio.htm](http://www.markwahl.com/golden_ratio.htm)
- The Golden Ratio Quiz: <http://cuip.uchicago.edu/~dlnarain/golden/quiz/htm>
- The Human Face: <http://goldennumber.net/face.htm>
- Examples of Art: [http://facultystaff.vwc.edu/~trfanney/golden\\_mean\\_wovslides/gm10o.html](http://facultystaff.vwc.edu/~trfanney/golden_mean_wovslides/gm10o.html)
- Thinkquest on the Golden Ratio: <http://www.goldenmeangauge.co.uk/index.html>
- **The Golden Proportion through a Dentist's Eyes:** <http://www.goldenmeangauge.co.uk/index.html>
- \*Golden Ratio in the Arts: <http://www.mikkeli.fi/opetus/myk/pv/comenius/kultainen.htm>

### Differentiation

- Stage 2 and 3 allow students to demonstrate understanding with choices, options, and/or variety in the products and performances without compromising the expectations of the Content Standards.
- Instruction is varied to address differences in readiness, interest, and/or learning profiles.
- Accommodations and differentiation strategies are incorporated in the design of Stage 2 and 3.

This unit of instruction (process) provides for teacher flexibility in how learning activities are implemented based on knowledge of a **student's abilities and interests**. This can be determined through a pre-assessment of students prior to beginning the unit of instruction. Students should be formatively assessed throughout the unit of instruction (quizzes, exit cards, observations) to determine areas of focus and to **guide teacher's instruction**.

The performance tasks for transfer of knowledge and skills found in Stage 2 of the unit provide opportunities for students to choose how they might demonstrate their knowledge, new skills, and understanding in the context of a commemorative object or the adaptations of new design function for an existing building.

<b>Academic Adaptations</b>	<b>Description</b>
<ul style="list-style-type: none"> <li>• Re-read directions.</li> <li>• Read and clarify.</li> <li>• Varied text and materials.</li> <li>• Oral reading.</li> <li>• Text summary.</li> <li>• Present material in small chunks.</li> <li>• Highlight notes.</li> <li>• Modified lesson. ⇒</li> </ul>	<p>I have students in my Design Art classroom who have IEPs. Therefore, the academic adaptations are provided to the entire class.</p> <p>Lesson modifications include: reduced length, chunking information, enlarged font.</p>
<b>Behavioral Adaptations</b>	<b>Description</b>
<ul style="list-style-type: none"> <li>• Preferential seating.</li> <li>• Re-focus attention.</li> <li>• Organizational skills.</li> <li>• Monitor use of agenda.</li> <li>• Group work.</li> <li>• Pre-writing.</li> <li>• Graphic organizers.</li> </ul>	<p>The behavioral adaptations are provided to the entire class.</p>
<b>Materials/Support</b>	<b>Description</b>
<ul style="list-style-type: none"> <li>• Techademic Coaching.</li> <li>• Computer.</li> <li>• Teacher observation.</li> </ul>	<p>The materials and supports are provided to the entire class.</p>

### Design Principles

- At least one of the design principles below is embedded within unit design.

- **Information Literacy** – the ability to know when there is a need for information and to identify, locate, evaluate, and effectively use that information for understanding an issue or solving a problem.
- **21<sup>st</sup> century Knowledge and Skills** – the ability to meet the demands of the global community and tomorrow’s workplace.
- **International Education** – the ability to appreciate the richness of our own cultural heritage and that of other cultures in order to provide cross-cultural communicative competence.
- **Universal Design for Learning** – development of the unit focused on students acquiring and demonstrating knowledge in multiple ways as well as providing opportunities for students to express themselves in multiple ways.

The design principle embedded within the unit is Information Literacy. Students demonstrate knowledge of when there is a need for information and identify, locate, evaluate, and effectively use that information to gain understanding of the Golden Mean.

- Standard 1: The student who is information literate accesses information efficiently and effectively.
- Standard 2: The student who is information literate evaluates information critically and competently.

- Standard 3: The student who is information literate uses information accurately and creatively.

### **Technology Integration**

Students make extensive use of computer skills and Internet research throughout this unit. Each activity is directed through the Internet and the online assessment allows the students to self-critique. Through the Internet, students are encouraged to visit museum websites from around the world to problem-solve answers.

### **Content Connections**

- Content Standards integrated within instructional strategies

Alignment of instruction addressing content standards in Visual Art, Social Studies, Mathematics, English Language Arts, and Information Literacy indicates the diverse nature of this unit of instruction.

## Delaware Model Unit Gallery Template

This unit has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model unit has undergone a rigorous peer review and jurying process to ensure alignment to selected Delaware Content Standards.

**Unit Title:** Artistic “Baggage”  
**Designed by:** Betsy DiJulio  
**Adapted by:** Rhonda Hill  
**For:** Innovative Schools

**Content Area:** High School Drawing  
**Grade Level(s):** 9-12

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### Summary of Unit

This Creative Challenge invites students to express something about their personal "emotional baggage" in a poetic and somewhat ambiguous way using drawings of common objects on top of prepared grounds. Photocopies of luggage drawings (whole pieces and details) are submerged in grounds prepared with newsprint and ink washes. On top, students draw and paint objects that, in themselves and through their relationships with each other, symbolize what lies at the crux of each student's "emotional baggage." Lessons and activities within the unit are adapted from Betsy DiJulio, M.A.,ED.S., retrieved from <http://thebloomingpalette.blogspot.com>

### Stage 1 – Desired Results

What students will know, do, and understand

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#### Delaware Content Standards

- 4.1E Identify historical and cultural characteristics of works of art
- 4.2E Describe how the arts and artists influence each other across history and cultures
- 4.3E Compare the purpose of works of art and design in history and cultures
- 4.4E Speculate on how history and culture give meaning to a work of art
- 4.5E Describe and differentiate the roles of artists in society across history and cultures
- 4.6E Describe how history and cultures influence the visual arts
- 4.7E Describe how the visual arts influence history and cultures
- 5.1E Discuss how individual experiences influence personal works of art
- 5.2E Identify ways the visual arts are used as communication
- 5.3E Describe personal responses to selected works of art
- 5.4E Analyze works of art to speculate why they were created
- 5.5E Evaluate the artist's intent and effectiveness in communicating ideas and emotions in works of art

- 5.6E** Apply visual arts vocabulary when reflecting upon and assessing works of art
- 5.7E** Describe how a work of art can convey a voice of one or a voice of many
- 6.1E** Compare and contrast relationships and characteristics between the visual arts and other disciplines
- 6.2E** Compare the use of technology, media and processes of the visual arts with other disciplines
- 6.3E** Describe and/or demonstrate how skills transfer between the visual arts and other disciplines
- 6.4E** Describe how learning in the visual arts helps develop essential skills for life and the workplace

### **Big Idea(s)**

Art has been created by all peoples, in all times and in all places.  
Art preserves and depicts history in ways words cannot.  
Art celebrates the unique characteristics of all cultures.  
Subject matter, symbols and ideas are all rooted in culture.  
Natural resources have influenced the creation of indigenous art forms.  
Timeless works of art are deemed important for a number and variety of reasons.  
Reflection, assessment and refinement are key steps in the process of creating art.  
The means to create art always changes.

### **Unit Enduring Understanding(s)**

Artists make thoughtful choices in creating works of art  
Artists create works of art employing both conscious and intuitive thought  
Art is a form of expression that employs a system of visual symbols.  
Art may be created solely to fulfill a need to create.  
Art is a universal symbol system that transcends language barriers.  
Art draws upon all aspects of human experience.  
The process of choosing and evaluating subject matter, symbols and ideas may be deliberate or intuitive.

### **Unit Essential Questions(s)**

Why do artists select one medium over another?  
To what extent is a work of art dependent upon the point of view of the artist?  
To what extent is a work of art dependent upon the point of view of the viewer?  
How and why is art used as a vehicle for communication?  
What is art?  
How does the use of specific symbols influence the meaning of a work of art?  
What makes art more or less authentic?

## **Knowledge and Skills**

### **Students will know...**

- How to use a sketchbook to practice with modeling techniques (hatching, cross-hatching, stippling, cross-contour marks, etc.)
- What a "weighted line" (widened and tapered line) is and how varied line quality can affect a composition.
- Knowledge of a value scale
- Basic understanding of composition and Elements and Principles of Design

### **Students will be able to...**

- Compare, analyze, and discuss works of art.
- Use technology to locate and access resources.
- Talk about and critique their personal work
- Organize visual information.

## **Stage 2 – Assessment Evidence**

Evidence that will be collected to determine whether or not Desired Results are achieved

### **Suggested Performance/Transfer Task(s)**

- Performance/Transfer tasks as evidence of student proficiency

An effective assessment for ALL students should be designed to include:

- \*Complex, real-world, authentic applications
- \*Assessment(s) for student understanding of the Stage 1 elements (Enduring Understandings, Essential Questions, Big Ideas) found in the Content Standards
- \*Demonstration of high-level thinking with one or more facets of understanding (e.g., explain, interpret, apply, empathize, have perspective, self-knowledge)

### **Performance Task #1**

- Students to write an entry in their sketchbooks about their personal emotional baggage. **If they wish for this to be considered “private” they may put a cover sheet over the page indicating so.**

- Students will choose poems that represents them in different states of emotion, and illustrate themselves in that state: where are you, what are your surroundings, are you alone or surrounded by others?, etc. Through the use of **this working definition of “emotional baggage” and the daily journaling** through both sketching and writings/reflections, the students will have a plethora of sources from where they can draw inspiration for their final products in this unit.
- Students can view the student chosen work samples that are online at <http://thebloomingpalette.blogspot.com> to identify with student work from other areas, although the possibilities for what exactly is included in their “baggage” is endless and completely up to student interpretation.

### **Rubric(s)**

See attached.

### **Other Evidence**

- Sketchbook tasks
- Vocabulary splash
- Experiments with creating texture
- Teacher observation
- Portfolio selections with summary of the processes used to complete selected work
- Artist study
- Vocabulary quiz
- Design Charts for self, peer and artist assessment

### **Student Self-Assessment and Reflection**

- Self-reflection
- Opportunities for reflection and revision

## **Stage 3 – Learning Plan**

(Design learning activities to align with Stage 1 and Stage 2 expectations)

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### **Key learning events needed to achieve unit goals**

- Instructional activities and learning experiences needed to align with Stage 1 and Stage 2 expectations

Include these instructional elements when designing an effective and engaging learning plan for ALL students:

- \*Align with expectations of Stage 1 and Stage 2
- \*Scaffold in order to acquire information, construct meaning, and practice transfer of understanding
- \*Include a wide range of research-based, effective, and engaging strategies
- \*Differentiate and personalize content, process, and product for diverse learners
- \*Provide ongoing opportunities for self-monitoring and self-evaluation

### **Class 1**

1. Discuss definition of "emotional baggage"— ideas, beliefs, or practices retained **from one's** previous life experiences, especially insofar as they affect a new situation in which they may be no longer relevant or appropriate.

2. Students to write an entry in their sketchbooks about their personal emotional baggage. (If you want to give them the option of keeping it private, have them tape a "cover sheet" over it.) 3. Students make a series of approximately six 5-minute gesture drawings of whole suitcases or details, aka "the baggage," at a series of drawing stations—suitcases set on tables with a few chairs gathered around. (We used white drawing paper and thick graphite sticks, but you could use whatever you prefer.)

4. Students choose their favorite two drawings for teacher to photocopy, if using photocopies. (Whole pieces and details are used); students are asked to choose their best two so small, medium and large copies of each). Note: If you prefer to save time and paper, students can use their actual drawings, but copies in different sizes are nice for unity.

5. Homework: students bring objects from home to symbolize their emotional baggage (or they can scavenge them from still-life storage).

### **Class 2: Prepared Grounds**

1. Students tape edges of their paper (they should stick masking tape on their clothes to remove a little of the adhesive and then lay along edges of paper).

2. Using matte medium or glue with a drop or two of water, students adhere 3 pieces of newsprint to their paper support, by brushing under and on top of newsprint. Small sponge brushes work well.

3. Next, students wash over their ground with a medium ink wash.
4. Then, students cut out their suitcase drawings and, using matte medium or very slightly diluted glue, adhere them in an interesting way to their support to create movement, repetition, unity and variety.
5. While grounds are drying, students should be working on their thumbnail sketches. The tricky part is helping students draw a thumbnail in which they indicated the lines and shapes established in their prepared grounds.
6. If desired, students can practice modeling the objects they have chosen.

### **Classes 3-6 : Developing Compositions**

1. To begin building up drawings on their grounds, students may block out areas with black ink to create separation between object and ground and, once dry, work on top. Or, they may work directly on the ground and add later add a black ink halo for separation.
2. In either case, to create objects, students lightly sketch the contours first in whatever media will show up and then paint the silhouettes solid white. Once dry, students use Ebony pencil to model the form of the objects, striving for drama through a wide range of values.

### **Classes 6-9: Color**

1. Students choose complementary colors of acrylic and dry brush them on to create additional layers of movement, unity, variety and emphasis.
2. As a finishing touch, students use embroidery thread in one or both colors—or even twist them together—and stitch into their pieces using restraint to develop the movement, unity, variety and emphasis even further. (They can use any type of stitching they choose, though mimicking that of the luggage can be effective and is, in fact, what inspired the use of thread.)
3. Finally, students may work back into compositions, if desired, to make any adjustments using any of the materials used so far plus, e.g. white and colored pencils.

### **Student Extension—Group Critique:**

Prior to the critique, students put their names in a box and then draw a name other than their own. Then they fill out a [Critique Form](#) (Attached) based on the work created by the student whose name they drew. They will refer to this form during the Critique. (This ensures that the critique moves along with no one grasping for something to say.) Next, students and teacher sit in a circle for the Critique during which each student, in turn, addresses at least 3 aspects of the work s/he critiqued, preferably a balance between "glows" (strengths) and "grows" (areas of improvement). After each student presents, the student whose work was critiqued is given an opportunity to address aspects of his or her work. Similarly, other students may comment.

### **Resources and Teaching Tips**

#### **GLOSSARY**

- "ish" colors--colors that cannot be named, e.g. pinkish-goldish-bronzish; colors that are layered or mixed for greater complexity and sophistication (credit: teaching artist, Nicole Brisco)
- Compositional Strategies--specific pictorial devices artists use to enhance compositions (see below for specifics)
- Dirty Water Wash--a wash created by mixing tiny amounts of warm and cool pigments (e.g. acrylic or tempera) to create a "dirty" neutral color/value
- Extended Lines--extending lines from edges of objects to link positive space with negative and to imbue artwork with the subtle look and feel of an architectural drawing (credit: teaching artist, Nicole Brisco)
- Prepared Ground--painting, collaging or otherwise altering the ground or surface on which you plan to draw or paint; lends a sense of "history and mystery"
- Two Glows and a Grow--a mini critique in which students trade artwork and comment constructively on at least two strengths and one area of improvement (credit: teaching artist, Nicole Brisco)
- Weighted Lines--contour lines that widen and taper to create volume, depth and general dynamism in a drawing or painting

<http://thebloomingpalette.blogspot.com>

### **Differentiation**

- Stage 2 allows students to work with poetry of their choice. This open-endedness allows for students to choose works with which they can feel confident in their understanding of.
- Instruction is student driven, from the working definition of “emotional baggage” all the way to the critique protocol at the end of the unit.

### **Design Principles for Unit Development**

At least one of the design principles below is embedded within unit design

- **International Education** - the ability to appreciate the richness of our own cultural heritage and that of other cultures in to provide cross-cultural communicative competence.
- **Universal Design for Learning** - the ability to provide multiple means of representation, expression and engagement to give learners various ways to acquire and demonstrate knowledge.
- **21<sup>st</sup> Century Learning** – the ability of to use skills, resources, & tools to meet the demands of the global community and tomorrow’s workplace. (1) Inquire, think critically, and gain knowledge, (2) Draw conclusions make informed decisions, apply knowledge to new situations, and create new knowledge, (3) Share knowledge and participate ethically and productively as members of our democratic society, (4) Pursue personal and aesthetic growth.(AASL,2007)

This unit integrates the 21<sup>st</sup> century skills of collaboration and critical thinking. Students are asked to think creatively and critically about accurate representations of their piece s created in class. They collaborate with each other in small groups during the critique process, where critique protocols are well known and part of the classroom culture. Through the use of t his critique protocol, students learn to both give and receive helpful, succinct, specific feedback that aids them in the refining and revision of their own work to increase their work quality and allow them to grow personally in communication and self reflection.

### **Technology Integration**

The ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information

## Artwork Critique Form

QUESTIONS	Write your ideas here. Give first impressions. Make guesses. Say what you see, do <b>not</b> say what you like, or don't like. <b>Do not judge.</b> Describe, analyze, and interpret.
1. What stands out the most when you first see it?	.
2. Explain the reason you notice the thing you mention in number 1.	.
3. As you keep looking, what else seems important?	.
4. Why does the thing you mention in number 3 seem important?	.
5. How has contrast been used?	.
6. What leads your eye around from place to place?	.
7. What tells you about the style used by this artist?	.
8. What seems to be hiding in this composition?	.
9. Why do you think this was partially hidden?	.
10. Imagine the feelings and meanings this artwork represents?	.
11. What titles could you give this artwork?	.
12. What other things interest you about this artwork?	.
form © Marvin Bartel, 2002	<a href="http://www.goshen.edu/art/ed/critiqueform.html">http://www.goshen.edu/art/ed/critiqueform.html</a> May be printed and copied for non profit classroom use.

## Assessment Rubric

CRITERIA	A	B	C	D	E
<b>Concept</b>	Fully grasped teacher-driven concept OR choose a concept that demonstrates thoughtfulness, richness, and/or evocativeness, personal relevance and investment	Mostly grasped teacher-driven concept OR choose a concept that demonstrates some thoughtfulness, richness and/or evocativeness, personal relevance and investment.	Partially grasped teacher-driven concept OR choose a concept that demonstrates little thoughtfulness, richness and/or evocativeness, personal relevance and investment	Largely failed to grasp teacher-driven concept OR chose a concept that demonstrates almost no thoughtfulness and/or evocativeness, personal relevance and investment	Fails to meet minimum standard
<b>Communication of Concept</b>	1. Approach to concept is effectively innovative and/or unique; avoids clichés, triteness and immature imagery and ideas 2. Communicates intended meaning clearly 3. Imagery is “poetic”	1. Approach to concept has some effective innovation and/or uniqueness; avoid most clichés and trite or immature imagery and ideas. 2. Communicated intended meaning somewhat clearly 3. Imagery is somewhat “poetic”	1. Approach to concept largely lacks effective innovation or uniqueness; relies somewhat on clichés and trite or immature imagery and ideas. 2. Communicates intended meaning with little clarity 3. Imagery largely lacks “poetry”	1. Approach to concept is not effectively innovative and/or unique, relies almost exclusively on clichés and trite or immature imagery or ideas 2. Largely fails to communicate intended meaning. 3. Imagery is not “poetic”	Fails to meet minimum standard
<b>Composition</b>	1. Composition is appropriately complex 2. Composition demonstrates mastery of all or nearly all of the “Principles of Design”	1. Composition is somewhat appropriately complex 2. Composition demonstrates mastery of most “Principles of Design”	1. Composition is only moderately, appropriately complex 2. Composition demonstrates mastery of some “Principles of Design”	1. Composition lacks sufficient appropriate complexity. 2. Composition demonstrates mastery of very few “Principles of Design”	Fails to meet minimum standard
<b>Craftmanship/Technical Skill</b>	1. Craftmanship and attention to detail is excellent 2. Student’s technical skill/mastery of media is excellent according to goals of assignment. (e.g. realism, expressionism, abstraction) 3. Use of materials may be appropriately innovative	1. Craftmanship and attention to detail is very good 2. Student’s technical skill/mastery of media is very good according to the goals of assignment. (e.g. realism, expressionism, abstraction)	1. Craftmanship and attention to detail is average with some areas that are sloppy. 2. Student’s technical skill/mastery of media is average according to goals of assignment. (e.g. realism, expressionism, abstraction)	1. Craftmanship and attention to detail is poor. 2. Student’s technical skill/mastery of media is poor according to goals of assignment. (e.g. realism, expressionism, abstraction)	Fails to meet minimum standard
<b>Contrast</b>	Possesses a wide range of values that fully enhance composition	Possesses a range of values that largely enhances composition OR possesses a wide range of values but they may detract somewhat from the composition	Possesses a moderate range of values (values may be all too light, all too dark or all too mid-range) OR possesses a range of values but they may detract significantly from composition	Possesses a very limited range of values OR possesses a moderate range of values that largely detract from composition	Fails to meet minimum standard
<b>Color</b>	1. Demonstrates strong knowledge of color theory 2. Color is complex (layered/mixed) unless otherwise specified 3. Color is appropriately neutralized; not muddy	1. Demonstrates good knowledge of color theory 2. Color is somewhat complex (layered/mixed) unless otherwise specified 3. Color is mostly appropriately neutralized; may verge toward muddiness	1. Demonstrates some knowledge of color theory 2. Color lacks much complexity (layered/mixed) unless otherwise specified. 3. Color is only somewhat appropriately neutralized, may be somewhat muddy	1. Demonstrates little knowledge of color theory 2. Color is not complex (layered/mixed) unless otherwise specified 3. Color is not appropriately neutralized; may be very muddy.	Fails to meet minimum standard
<b>Class Ethics/Effort/Commitment/Participation</b>	This is a holistic, somewhat objective grade. An “A” is expected and assumed of all students, hence, this grade is not assigned unless a student earns a “B” or lower based on negative behavior and/or lack of effort, commitment, or participation during a particular Creative Challenge or assignment. Negative behaviors include disruptions to teaching and learning, disrespect, inappropriate language, poor attitude, talking over the teacher, excessive tardies, etc.				
<b>Comments:</b>					

## Delaware Model Unit Gallery Template

Unit Title: Introduction to Sight-Reading

Designed by: Chris Celfo

District: Innovative Schools

Content Area: Music

Grade Level(s): 7-12

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### Summary of Unit

Students will learn the foundations for reading musical notation in both the Treble and Bass clef. They will be introduced to the musical solfege system, and through use of hand signs, will discover how to apply solfege syllable to a C Major Scale. Students have already been introduced to basic rhythms.

### Stage 1 – Desired Results

*What students will know, do, and understand*

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### Delaware Content Standards

- 1.2 Sing on pitch within the appropriate singing range
- 1.4 Sing demonstrating proper posture and breathing
- 1.5 Sing demonstrating proper vocal technique
- 5.1 Identify and define standard notation symbols
- 5.3 Read melodic notation
- 5.4 Read a single line of an instrumental or vocal part
- 5.5 Notate symbols and terms for meter and rhythm
- 5.6 Notate symbols for pitch
- 5.9 Read unfamiliar music with tonal and rhythmic accuracy

### Big Idea(s)

Reading and notating music.

### Unit Enduring Understanding(s)

Students will understand that music has a universal written language.

### Unit Essential Questions(s)

- What is solfege and how do we use it to read music?
- Why is sight reading important to musicians?

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## Knowledge and Skills

### Students will know...

- The acronyms for reading notes on the treble clef staff
- The acronyms for reading notes on the bass clef staff
- The definition of a scale
- The Solfege syllables and how they apply to the C major scale
- The hand signs for the Solfege syllables

### Students will be able to...

- Recognize a scale as a series of notes
- Sing the C major scale using "do re mi" etc.
- Identify each step of the major scale using do, re, mi, fa, so, la, ti, do
- Sing the major scale with accuracy
- Demonstrate the use of hand-signs
- Demonstrate proper singing posture, breath control and support

Stage 2 – Assessment Evidence  
Evidence that will be collected to determine whether or not Desired Results are achieved

### Suggested Performance/Transfer Task

Written Quiz on identifying notes both in the Treble and Bass clefs, as well as a quiz on applying Solfege to the C Major Scale

Assessment on sight-reading w/Solfege, using following rubric:

Sight-Singing Rubric					
	Unacceptable	Poor	Fair	Good	Excellent
	0 pts	1 pt	2 pts	3 pts	4 pts
<b>Rhythmic Accuracy</b>	<b>Unacceptable</b>	<b>Poor</b>	<b>Fair</b>	<b>Good</b>	<b>Excellent</b>
	Incorrect rhythms consistently occur significantly detracting from the overall performance.  Rhythms generally unrecognizable.	Incorrect rhythms frequently occur detracting from the overall performance.  Rhythms generally unrecognizable.	Incorrect rhythms occasionally occur detracting from the overall performance.	Incorrect rhythms rarely occur without detracting from the overall performance.	Rhythms are consistently accurate as notated enhancing the overall performance.  Professional level rhythmic accuracy.
<b>Pitch</b>	<b>Unacceptable</b>	<b>Poor</b>	<b>Fair</b>	<b>Good</b>	<b>Excellent</b>
	Incorrect pitches consistently occur significantly detracting from the overall performance.  Pitches generally unrecognizable.	Incorrect pitches frequently occur detracting from the overall performance.  Pitches generally unrecognizable.	Incorrect pitches occasionally occur detracting from the overall performance.	Incorrect pitches rarely occur without detracting from the overall performance.	Pitches are consistently accurate as notated enhancing the overall performance.  Professional level pitch accuracy.

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<b>Note Name Accuracy</b>	Note names are never accurate, significantly detracting from the overall performance.	Note names are rarely accurate, detracting from the overall performance.	Note names are usually accurate, but detracting from the overall performance.	Note names are usually accurate without detracting from the overall performance.	Note names are consistently accurate.
<b>Solfege Accuracy</b>	Solfege syllables are never accurate, significantly detracting from the overall performance	Solfege syllables are rarely accurate, detracting from the overall performance.	Solfege syllables are usually accurate, but detracting from the overall performance.	Solfege syllables are usually accurate without detracting from the overall performance.	Solfege syllables are consistently accurate.

### Other Evidence

Informal assessment of student's performance  
Use of questioning during whole group instruction

### Student Self-Assessment and Reflection

Students will be asked to complete exit tickets to their grasp of the enduring understandings, essential questions, and objects of the unit.

**Stage 3 – Learning Plan**  
(Design learning activities to align with Stage 1 and Stage 2 expectations)

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Key learning events needed to achieve unit goals

#### Lesson One: Basics of Melodic Notation(Treble Clef)

Give students each a piece of Staff paper.

Introduce the musical staff, and indicate the 5 lines and 4 spaces.

Draw the Treble Clef, and have students practice drawing them on the first line of the staff paper. Observe and make corrections.

Teach students the saying Every Good Boy Does Fine and FACE, and explain how it applies to the notes and spaces on the staff.

Write EGBDF and FACE from bottom left to top right on the lines and spaces respectively.

Show students that as notes go up the staff, they go line – space – line – space, etc.

Show students that as you go up the staff from line to space, that it is like going up stairs and you go up your alphabet in order.

Draw a series of different "line" notes on the board, and assess students randomly, one at a time, by having them verbally identify the notes.

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Draw a series of different "space" notes on the board, and assess students one at a time by having them verbally identify the notes.

Explain to students that notes can get higher and higher by drawing extra lines – *ledger lines*.

On their staff paper, have students draw a quarter note on each of the lines, and label them appropriately.

Do the same with the spaces.

Have students take a short quiz at the end of class identifying notes on the Treble clef Staff. For homework, give them a worksheet to complete (self created) for next class.

### **Lesson Two: Basics of Notation (Bass Clef)**

Give students each a piece of Staff paper.

Introduce the musical staff, and indicate the 5 lines and 4 spaces.

Draw the Treble Clef, and have students practice drawing them on the first line of the staff paper.

Teach students the saying Great Big Dogs Fight Animals and All Cows Eat Grass and explain how it applies to the notes and spaces on the staff.

Write GBDFA and ACEG from bottom left to top right on the lines and spaces respectively.

Reinforce to students that as notes go up the staff, they go line – space – line – space, etc, , and that as you go up the staff from line to space, that it is like going up stairs and you go up your alphabet in order.

Draw a series of different Bass Clef "line" notes on the board, and assess students one at a time by having them verbally identify the notes.

Draw a series of different Bass Clef "space" notes on the board, and assess students one at a time by having them verbally identify the notes.

Reinforce to students that notes can get higher and higher by drawing extra lines – *ledger lines*.

Have students take a short quiz at the end of class identifying notes on the Bass clef Staff. For homework, give them a worksheet on Bass Clef Notes to complete (self created) for next class.

Give quiz the next class on Treble, and Bass Clef Notes.

### **Lesson Three: Solfege**

Play the song "Do Re Mi" for students. Tell them the song comes from the musical *The Sound of Music*.

Teach the song by phrases.

Sing several times, having students sing as much as they can remember.

Teach students the Solfege hand signs one at a time.

Show how the hand signs correlate to the steps of the scale.

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As you use the hand signs, make sure to place them spatially high and low as they correspond to the scale.

Add the hand signs as you sing the song this time.

You may want to use a recording of the song for students to sing along with so that you can help them with the hand signs.

Have students echo patterns of hand signs. Sing and sign. Start with So-Mi.

Add La, Re, and Do (pentatonic scale).

After significant practice, add Fa and Ti.

Pair students up, and have them practice drilling each other using hand signs. Observe their performance.

This will be an *ongoing skill practice*. It may take several lessons to be able to echo all the intervals of the major scale.

Use of echoing hand-sign patterns should be done as a drill over a long period of time.

You will get to a point where you can use this skill to teach songs.

#### **Lesson Four: Applying Solfege to the C Major scale**

Tell students that the term scales refer to a series of notes that go in an ascending and descending manner.

Have students echo hand signs Do, re, mi, fa, sol, la, ti, do.

Inform them that what they just sang, was the C Major scale.

Explain to students the students that the **major scale** is the foundation from which all other scales are formed.

On the board, write the letters, C, D, E, F, G, A, B, C.

Explain to students that a C major scale begins with a C and ends with a C.

Have them echo hand sign patterns to the major scale again, this time substituting note names for the syllables.

Create various hand-sign patterns as the students continue to echo using note names instead of syllables.

Put them in pairs, and have them drill each other using hand-signs.

In the book *The Choral Warm-up Collection* by Sally Albrecht, teach the students exercise #85.

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After students have learned the exercise on syllable, have them perform it on note names.

As an exit ticket, write a series of random letters from the C Major scale on the board, and have students identify the solfege syllable to the note names of the Major Scale.

### **Lesson Five: Applying Solfege to Various Melodies**

Make copies of page 1 in the MELODIA sight singing course-Book one.

Give each student a copy, and have them look at exercise #1.

Ask them to look the exercise over, and in their heads determine the note names of each note in the exercise.

After 1 minute, play the starting pitch for them, and as a class sing through the exercise on NOTE NAMES. Observe students as they sing, to ensure they are following.

Repeat again to give students a chance to fix their mistakes.

Next, ask them to look the exercise over, and in their heads determine the solfege syllable of each note in the exercise.

After 1 minute, play the starting pitch for them, and as a class sing through the exercise on solfege syllables. Observe students as they sing, to ensure they are following.

Repeat again to give students a chance to fix their mistakes.

Repeat steps 3-8 with exercises 2 and 3.

Assess each student individually on exercise 4. Like earlier, give them a minute look it over to determine note names, and a minute for solfege. Use rubric from stage three.

This process should be continued for 2 weeks, using the exercises on subsequent pages. After two weeks, cut the time they have to look over it to 30 seconds, and then after four weeks, cut it down to 15 seconds. Assess students once a week to track progress.

## Resources and Teaching Tips

### Resources:

*Centennial Songbook*, or other source for *Do Re Mi*  
Piano  
Recording of Do Re Mi on cassette or CD  
"The Choral Warm-up Collection" by Sally Albrecht  
Melodia-A Course In Sight-Singing by Samuel Cole and Leo Lewis

### Differentiation

Work in pairs to support learning  
Students use the visual, auditory, and kinesthetic learning styles during this unit.  
While students are in pairs doing hand-signs, it allow teacher to differentiate his/her time, moving between groups as the students need support.

## Technology Integration

The ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information

As written, this unit does not make use of a great deal of technology. However, if the teacher wished to extend the unit, students could certainly go online and search for lessons that drill note reading.

## Content Connections

Content Standards integrated within instructional strategies

Social Studies – Learning about non-western cultures. Teacher could extend the unit with a short comparative study on texture from cultures around the world.

ELA – The musical composing process is similar to written composition.

Math – Dividing time with measures, beat, syncopation

## Delaware Model Unit Gallery Template

Unit Title: Choir/Singing Fundamentals

Designed by: Chris Celfo

District: Innovative Schools

Content Area: Music

Grade Level(s): Grade 7-12

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### Summary of Unit

Singing is a main focus in the choir. Students will be able to sing using various techniques and understand how these techniques change the expression of the song. By using proper breathing and vocal techniques they will keep their voices healthy and know how to keep their vocal chords safe.

## Stage 1 – Desired Results What students will know, do, and understand

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### Delaware Content Standards

- 1.2 Sing on pitch within the appropriate singing range
- 1.3 Sing on pitch in rhythm while applying a steady beat
- 1.4 Sing demonstrating proper posture and breathing
- 1.5 Sing demonstrating proper vocal technique
- 1.6 Sing expressively utilizing dynamics and phrasing
- 1.9 Sing in groups in response to gestures of a conductor
- 1.12 Sing music in 2 and 3 parts
- 1.13 Sing in groups and blending vocal timbres
- 1.14 Sing a repertoire of songs representing different genres, styles, and languages
- 1.15 Sing expressively with phrasing, dynamics, and stylistic interpretation
- 1.16 Sing music in 4 parts with and without accompaniment
- 1.17 Sing a repertoire of choral literature with expression and technical accuracy, including songs performed from memory
- 5.4 Read a single line of an instrumental or vocal part
- 5.7 Notate symbols and terms referring to dynamics, tempo, and articulation
- 5.8 Read an instrumental or vocal score
- 5.10 Read simple melodies in 2 or more clef
- 6.1 Express changes and contrasts in music through movement

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- 6.3 Identify and classify voices by range and quality
- 6.6 Express through verbal and nonverbal means various styles/genres of music
- 6.7 Identify the elements of music within a musical composition

### Big Idea(s)

Musical Expression

### Unit Enduring Understanding(s)

Singing in a choir is different from singing as a soloist.

Choirs must listen to each other as they sing to ensure blend and balance.

Expression of a song is demonstrated through the use of tone and changes in vowels and dynamics.

### Unit Essential Questions(s)

What does proper breathing look/feel like?

Why is it important to breathe correctly while singing?

What are the physical characteristics necessary for good breath support?

How are balance and blend achieved within a choir?

How do dynamics affect the mood of a song?

How do expressive elements communicate an idea and/or feeling in a song?

### Knowledge and Skills

#### Students will know...

The definition of balance, blend, dynamic, and dynamic symbols

How to breathe properly while sitting and standing

#### Students will be able to...

Exhibit proper breathing while singing

Perform with proper balance within a choir

Perform with proper blend within the choir

Sing with dynamic contrast

Stage 2 – Assessment Evidence

Evidence that will be collected to determine whether or not Desired Results are achieved

Suggested Performance/Transfer Task(s)

Teacher will choose 15-20 measure sections from selections currently being studied. The teacher will listen to the students’ perform these sections in groups of 4-6 students. The groups will have the opportunity to select a section of the piece that they are comfortable with. The teacher will also have each student sing the selection individually. The following rubric will be used to assess each student.

Vocal Performance Rubric-					
	Unacceptable	Poor	Fair	Good	Excellent
	0 pts	1 pt	2 pts	3 pts	4 pts
<b>Tone Quality</b>	Tone is never focused, clear, centered throughout the dynamic range, significantly detracting from the overall overall performance.	Tone is rarely focused, clear, centered throughout the dynamic range, detracting from the overall performance.	Tone is mostly focused, clear, centered throughout the dynamic range, detracting from the overall performance.	Tone is usually focused, clear, centered, and ringing tone throughout the dynamic range without detracting from the overall performance.	Tone is consistently focused, clear, centered, and ringing tone throughout the dynamic range enhancing the overall performance. Professional tone quality.
	Dynamics, blend, and balance is never accurate within the ensemble, significantly detracting from the overall performance.	Dynamics, blend, and balance is rarely accurate within the ensemble, detracting from the overall performance.	Dynamics, blend, and balance is mostly accurate within the ensemble, detracting from the overall performance.	Dynamics, blend and balance is usually accurate within the ensemble without detracting from the overall performance.	Dynamics, blend, and balance is consistently accurate within the ensemble enhancing the overall performance. Professional level dynamics, blend, and balance.
<b>Dynamic, Blend and Balance</b>	Correct posture and breath mechanics are	Correct posture and breath mechanics	Correct posture and breath mechanics	Correct posture and breath mechanics	Correct posture and breath mechanics

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	never employed, significantly detracting from the overall performance.	are rarely employed, detracting from the overall performance.	are often employed, but detract from the overall performance.	are usually employed, without detracting from the overall performance.	are consistently employed enhancing the overall performance.  Professional level technique
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### Other Evidence

Responds to questioning during whole group instruction

Informal assessment during class when students are rehearsing

### Student Self-Assessment and Reflection

A great deal of reflection will occur throughout the unit as the teacher guides the students to discuss the fundamentals of singing in a choir

Students will be asked to complete exit tickets to reflect their thinking on the lesson's content and their grasp of the enduring understandings and essential questions.

## Stage 3 – Learning Plan (Design learning activities to align with Stage 1 and Stage 2 expectations)

Key learning events needed to achieve unit goals

### **Lesson One: Breathing**

Have students place a hand on their belly button.

As they breathe, explain that this area should expand first when they breathe in and then spread upwards until chest is expanded.

Observe and make sure students don't lift their shoulders or push their stomach out.

Have the students lay flat on their backs, and place their hands on waists, fingers pointing towards your belly button. (If you have access to the stage at your school, this is a great place to do this exercise.)

Tell them to focus on filling up your stomach from the bottom to the top taking a slow deep breath.

Inform them that the aim is not to fill themselves to bursting but to inhale enough air so that you can feel the difference between a shallow breath taken when breathing from the chest.

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Make sure that their stomach rises and their hands rise gently up and outward until they feel their chest expanding.

Indicate that the expansion is not only at the front of the body but also to the sides and back as well.

Have them breath out in slowly for a count of 8, hold for a count of 4, and then exhale slowly for a count of 8.

Repeat the exercise 10 times

Observe each student and correct any issues you may see.

Tell the students that the next step is to practice breathing while singing.

Have the students stand up tall with proper singing posture (previously taught).

Explain that when breathing standing up, they should have the same feeling they had in their lower body while lying down.

Have them breath out in slowly for a count of 8, hold for a count of 4, and then sing the "oo" vowel for a count of eight.

Repeat the exercise several times, observing for proper posture and breathing.

Repeat the exercise, but increase the counts they are singing to 16. Have students raise their hands when they run out of air.

Eventually try to work up to 24+ counts with students continuing to raise their hands when they run out of air. This will help you to assess who needs extra-help.

These breathing exercises should be continued throughout the year, and the technique should be incorporated in each piece being studied.

## **Lesson Two: Dynamics in music performance**

Teacher will explain the definition of dynamics and talk to students about how the degree of loudness or softness of music affects the mood of the music. Play examples for the students. These examples should "catch their attention," so make sure to choose examples that they will enjoy.

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As the students listen to each sample, have them write down a word or two to describe what they are hearing. Then go around the room and have each student share his/her word.

After listening to the examples, lead discussion with students on how they think the dynamics affect the music. Tell them to get out their musical selections that they are working on and sing the pieces, dividing them into sections of dynamic contrast.

After singing each section, have the students discuss how these dynamics effect the mood of the music and why they think the composer used these dynamics in these sections.

Go back to the music and have individuals sing specific sections of the music to individually demonstrate the varying dynamic levels. To differentiate, with the more experienced singers, pick the more challenging sections; for the less experienced singers, pick a section that they are capable of performing effectively to demonstrate the dynamic contrast.

Alternatively, let the students pick which section they want to sing and this will lead to "volunteers" singing individually. After allowing time for individuals to sing, have the choir sing through the piece and record it. Have class listen to the recording.

Have students reflect on the performance by completing the "dynamic" section of the rubric above.

### **Lesson Three: Balance/Blend**

Teacher will provide class with an overview of the topics of Balance and Blend.

Teacher will instruct the soprano section to sing one or two short phrases from a selection in unison and then ask other choir members for a response.

On a piece of paper, have students answer the following questions

- Was the section in tune?
- On which notes - specifically - could a subtle beating sound be heard, suggesting that one or more players was a little off pitch?
- Was the section breathing properly?
- Did they demonstrate good posture?
- Did they blend well, or did one or two players dominate the section?

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Teacher will do the same with the alto, tenor, and bass sections individually.

Teacher will then have the sopranos and altos sing together. Then ask the male voices, was there an acceptable balance, or did the alto section dominate the others?

The process will then be repeated with the boys performing, and asking the ladies the same questions.

Because the above approach risks embarrassing weaker singers, it is usually best to avoid singling out particular students, even when their shortcomings are obvious. Focus instead on the need for the section as a whole to overcome any weaknesses, and encourage those listening to give positive as well as negative comments.

By moving systematically through the choir in this way and summarizing the findings of the group in a kindly and encouraging manner, the choir director can do much to raise awareness within the ensemble of the basics of intonation, breathing, balance and blend. It will also help produce a much better sound from the choir as a whole.

### Resources and Teaching Tips

#### **Resources:**

Various repertoire of musical selection chosen by teacher

#### **Differentiation:**

Work in small groups and pairs to support learning.

When dividing up students to sing some students with learning disabilities may benefit from being in a group with stronger singers.

Students use the visual, auditory, and kinesthetic learning styles during this unit.

Students choose which passages to sing during evaluations.

### Technology Integration

The ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information

As written, this unit does not make use of a great deal of technology. However, if the teacher wished to extend the unit, students could certainly go online and search for samples of music that exhibit proper balance/blend. The teacher could also download a video of a choir singing and talk about the singing fundamentals being used.

### Content Connections

Content Standards integrated within instructional strategies

Math – Dividing time with measures, beat, syncopation

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## Delaware Model Unit Gallery Template

Unit Title: Performance Skills

Designed by: Chris Celfo

District: Innovative Schools

Content Area: Music

Grade Level(s): 6-12

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**Summary of the Unit:** Students will learn the proper etiquette for being a performer and also an audience member, as well as what it takes for a choir to look successful. They will understand that different performance and styles of music require different behaviors for both the performer and the audience. Performances in the choir and classroom activities will develop personal and interpersonal skills. These experiences will help them to be a lifelong supporter of the arts in their communities and appreciate the role of music in society.

### Stage 1 – Desired Results

What students will know, do, and understand

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#### Delaware Content Standards

- 1.2 Sing on pitch within the appropriate singing range
- 1.3 Sing on pitch in rhythm while applying a steady beat
- 1.4 Sing demonstrating proper posture and breathing
- 1.5 Sing demonstrating proper vocal technique
- 1.6 Sing expressively utilizing dynamics and phrasing
- 1.9 Sing in groups in response to gestures of a conductor
- 1.12 Sing music in 2 and 3 parts
- 1.13 Sing in groups and blending vocal timbres
- 1.14 Sing a repertoire of songs representing different genres, styles, and languages
- 1.15 Sing expressively with phrasing, dynamics, and stylistic interpretation
- 1.16 Sing music in 4 parts with and without accompaniment
- 1.17 Sing a repertoire of choral literature with expression and technical accuracy, including songs performed from memory
- 6.1 Express changes and contrasts in music through movement
- 6.6 Express through verbal and nonverbal means various styles/genres of music

- 6.7 Identify the elements of music within a musical composition
- 6.9 Identify and explain compositional devices and techniques used in a musical work
- 7.2 Identify ways for evaluating compositions and performances
- 7.4 Discuss and evaluate the relationship between music and human emotions
- 7.5 Develop and apply criteria for evaluating compositions and performances
- 8.3 Make connections with other disciplines as they relate to music
- 8.4 Compare and contrast terms common between the arts and other curricular areas (e.g., texture, color, form)
- 8.5 Compare and contrast artistic themes across cultures, history, and multiple media

### Big Idea(s)

Musical performance

### Unit Enduring Understanding(s)

A musical performance is not only about sounding good, it is about *looking* good as well.

Participating in a choir and using knowledge of musical skills in a singing performance can help build self-esteem and confidence.

Demonstrating respect for a performance, both on and off the stage, can foster a deep appreciation for other performers.

### Unit Essential Questions(s)

What is the role of the conductor in musical interpretation?

Why do manners and etiquette matter to a chorus member?

What do you want the audience to feel when you are performing?

### Knowledge and Skills

#### Students will know...

The elements of proper singing posture

How to exhibit proper posture when on risers

How facial expression affects performance

How to follow a conductor

Elements of proper stage presence

What proper performance etiquette looks like

What proper audience etiquette should look like

The role of the conductor and how to follow him/her

Students will be able to...

Exhibit good singing posture

Follow a conductor

Use facial expressions effectively while singing

Perform with proper performance manners and etiquette

**Stage 2 – Assessment Evidence**

Evidence that will be collected to determine whether or not Desired Results are achieved

**Suggested Performance/Transfer Task(s)**

Teacher will video tape the choir’s performance at a rehearsal two weeks prior to concert, and then again at the concert. He/she will then watch the performances, and evaluate each student using the following rubric:

<b>Performance Rubric</b>					
<b>Following Conductor</b>	<b>Unacceptable</b>	<b>Poor</b>	<b>Fair</b>	<b>Good</b>	<b>Excellent</b>
	Student is never watching/following conductor, detracting from the overall performance.	Student rarely watches/follows conductor, detracting from the overall performance.	Student is occasionally watching/following conductor, but detracting from the overall performance.	Student is usually watching/following conductor, without detracting from the overall performance.	Student is consistently watching/following conductor, detracting from the overall performance.
<b>Etiquette</b>	<b>Unacceptable</b> Etiquette is never appropriate, significantly detracting from the overall performance.	<b>Poor</b> Etiquette is rarely appropriate, detracting from the overall performance.	<b>Fair</b> Etiquette is usually appropriate, but detracting from the overall performance.	<b>Good</b> Etiquette is usually appropriate, without detracting from the overall performance.	<b>Excellent</b> Etiquette is consistently appropriate.  Professional level following
<b>Facial Expression</b>	<b>Unacceptable</b> Effective facial expressions are never employed within the ensemble, significantly detracting from the overall performance.	<b>Poor</b> Effective facial expressions are rarely employed within the ensemble, detracting from the overall performance.	<b>Fair</b> Effective facial expressions are mostly accurate within the ensemble, detracting from the overall performance.	<b>Good</b> Effective facial expressions are usually employed within the ensemble without detracting from the overall performance.	<b>Excellent</b> Effective facial expressions are consistently employed within the ensemble enhancing the overall performance.  Professional level expression

<b>Posture</b>	<b>Unacceptable</b>	<b>Poor</b>	<b>Fair</b>	<b>Good</b>	<b>Excellent</b>
	Correct posture is never employed, significantly detracting from the overall performance.	Correct posture is rarely employed, detracting from the overall performance.	Correct posture is often employed, but detracts from the overall performance.	Correct posture is usually employed, without detracting from the overall performance.	Correct posture is consistently employed enhancing the overall performance.

### Other Evidence

Exit tickets

Reflection of performance as a classroom discussion

Use of questioning during whole group instruction

### Student Self-Assessment and Reflection

A great deal of reflection will occur throughout the unit as the teacher guides the students to discuss the performance of music.

Students will be asked to complete exit tickets to reflect their thinking on the lesson's content and their grasp of the enduring understandings and essential questions.

After performance, students will have a chance to reflect on their work, watching both performances and writing about their personal performance.

## Stage 3 – Learning Plan (Design learning activities to align with Stage 1 and Stage 2 expectations)

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Key learning events needed to achieve unit goals

### Lesson One: Posture

1. Explain to the group that proper singing technique begins with good posture, setting up the body to produce the best sound possible.
2. Have students stand in a circle facing each other, and give them the following instructions. Circulate around the circle and correct any problems:
3. Have students place feet shoulder length apart, one foot slightly ahead of the other, weight evenly distributed and toward your toes. Instruct them to rise up on tiptoes, and lower back down slightly so heels are barely touching the ground.
4. Have them slightly bend their knees so that they can feel it, but no one can see it. Instruct them to wiggle knees forward and back to feel how relaxed they are while still standing tall.

5. Instruct them to raise chest slightly, creating a lift throughout the middle of their body. Have them tap on sternum to feel the area that should be lifting (show them where sternum is).
6. Indicate that in raising your chest you should feel a tilt in your ribcage, rotating upward from the sternum.
7. Have them relax and lower shoulders comfortably, parallel to chest. Instruct them to raise shoulders to ears, and then lower them to the ground. Then have them take a deep breath, relax, and try to lower them an inch more.
8. Have them place their arms at their sides, hanging them in a relaxed position. Instruct them to shake their hands out and let their fingers hang.
9. Tell them to imagine their chin resting on a table, parallel to the ground.
10. Ask each group to demonstrate their version of correct body posture for the group. Class members are encouraged to evaluate group performance in a positive, constructive way.
11. To further emphasize correct alignment, the teacher asks students to find a blank wall space and stand with their backs against the wall. Students place their heels, buttocks, shoulder blades, and back of the head (with chin parallel to the ground) against the wall. The teacher points out that this is the "standing tall" posture we're looking for. Students are then instructed to move 6 inches away from the wall, keeping this posture alignment.
12. In a final step, students are asked to rise up on their tip-toes, and lower slightly so that their heels are barely touching. This will create the weight shift desired.
13. While this lesson should be ongoing throughout the year, when concert time comes, teacher should bring the students on stage to the risers; have them arrange themselves in concert order. They will then display appropriate posture while singing a selection chosen by the teacher.
14. Teacher will video tape performance, and have students evaluate themselves using the "posture" portion of the performance rubric.

### **Lesson Two: Following a conductor**

1. Have students write down what they believe a choir conductor is communicating when conducting a choir.
2. Make a list on the board of some of the student's answers.
3. Give students a brief overview of how a conductor keeps the beat
4. Explain how the first beat of the baton is usually downward and is known as the "ictus," or "downbeat.", the second beat the baton continues inward toward the conductor's body, beat three moves outward, away from the body. and finally, the conductor moves his baton upward to signify the final beat of the measure (the "upbeat" or "prep beat").

5. Explain how this four beat conducting pattern is repeated throughout the entire piece of music, helping all members of the ensemble know where they are at in the overall performance simply by keeping one eye on the conductor's baton.
6. Inform them that other kinds of music with different meters and beats per measure are conducted in different ways, but the ictus and the upbeat will always be done with the same basic motions, with the upbeat immediately preceding the ictus.
7. Have students sing “My Country ‘Tis Of Thee”, while watching you conduct. Explain to them the importance of watching, and following the tempo they are given. Vary the tempo dramatically throughout, and keep a close eye on who is following correctly. Kids love this activity, and it really shows them the power the conductor has.
8. Explain to the class that the conductor does much more than simply keep a beat, however. The conductor is solely responsible for making the chorus sing the music exactly as he or she feels is appropriate, at varying dynamic levels. Large motions often signify loud, smooth passages. Small, gently motions will accompany soft, delicate passages.
9. Have students sing “My Country ‘Tis Of Thee” again, and this time vary large, and small motions, and tell students to adjust their dynamic level based on the conductors gestures.
10. Also discuss that the conductor will also express articulations through his or her gestures. Choppy, short motions go along with bouncy, choppy rhythms, while bigger, flowing motions will signify smooth, legato passages.
11. Have students sing once again, this time stressing different articulations.
12. Finally, have students sing one last time, and combine varied dynamics, tempo, and articulations.
13. This lesson is continuous, in the sense that the teacher should vary his/her conducting on a daily basis to get students accustomed to following a conductor.

### **Lesson Three: Facial Expression**

1. Ask students to write down reasons why facial expressions are important in singing.
2. Have students discuss their answers in groups of 3-5, and then share with the entire class.
3. Stress to the class the importance of facial expressions, and the importance that they convey the mood of the text.
4. Explain how face and body are very vital to your song delivery, in that appropriate facial expressions can make a song come alive!

5. Discuss/demonstrate the importance of the raising (slightly) of the eye/eyebrow area as this technique will enhance the use of facial expressions while adding more depth and expression to the singing tone.
6. Throughout the semester, spend time analyzing lyrics with the students. What is the song about? What mood is the composer trying to convey? Teacher should encourage students to “feel” the lyrics, and be aware of using effective facial expression while singing.
7. Video tape the class during rehearsal, and then have the class evaluate their facial expression by watching their performance, and answering the following questions:
8. Are you just moving your lips, or are you gradually moving your mouth to accommodate the vowels in the song?
9. Are you lifting your eyebrows?
10. Do the facial expressions of the singers convey the mood of the text?
11. Have students provide exit tickets answering the questions.

#### **Lesson Four: Concert Performance Etiquette**

1. Have students jot down what they believe are elements of proper performance etiquette.
2. Discuss as a class, and make a list on the board.
3. Demonstrate to students the proper way to file on and off the risers. Stress the importance of maintaining singing posture from the moment they enter the stage, till the moment they exit the stage.
4. Discuss the importance of remaining quiet while filing on and in between selections.
5. Teach students the proper way to bow as a chorus.
  - Throughout the year, do several “practice runs” of a performance by doing the following:
  - Have students line up in riser order in the chorus room.
  - Have them enter the auditorium, and load onto the risers.
  - Run through 30 seconds of each song.
  - Have them bow as a group, and exit the risers.
  - Two weeks before the 1<sup>st</sup> performance, video tape the “practice run” and evaluate students using the “Etiquette” portion of the rubric.
  - This lesson should be revisited many times throughout the year.

## Resources and Teaching Tips

### Resources:

Video Camera

“Lyrics to “My Country Tis Of Thee”

A variety of musical repertoire

### Differentiation

Students use the visual, auditory, and kinesthetic learning styles during this unit.

## Technology Integration

The ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information

The teacher makes use of video by recording the chorus and having them evaluate their own performance skills.

## Content Connections

Content Standards integrated within instructional strategies

Math – Dividing time with measures, beat, syncopation

## ***Delaware Model Unit Gallery Template: Physical Education***

This unit has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model unit has undergone a rigorous peer review and jury process to ensure alignment to selected Delaware Content Standards.

**Unit Title: Walking for Lifetime Fitness**

**Designed by: Sandy Kupchick**

**District: Brandywine**

**Grade Cluster: 9-12**

**Time Frame: 4 Lessons**

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### **Summary of Unit**

This unit will introduce students to walking as a lifetime fitness activity. Students will be introduced to the health-related components of fitness that are associated with walking, learn how to use pedometers as well as Nordic Walking poles, and begin a unit in walking activities. Subject matter from Math and English will be incorporated in this unit via worksheet tasks and homework assignments. Tasks include reviewing and discussing benefits of walking throughout a lifetime, completing a step estimation worksheet, calculating how fast they walk, looking into how many calories do you burn by walking, completing a scavenger hunt, and designing a walking map for home use. Finally, we would like our students to be creative and design/make their own walking sticks from items already in their home, no purchase necessary. Also all steps will be recorded in class to show the students how far they have walked.

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## **Charter School Unit Modification**

### **Guiding Questions**

1. Why was this model unit of **instruction selected as part of your schools'** curricular submission?

This unit is posted on the DDOE web site as an exemplary unit of instruction for PE. It teaches a unit on walking that can be applied at any point in the student's lives.

2. What modifications have been made to the model unit of instruction to meet the specific needs of the student population your school serves?

No modifications will need to be made based on the student population.

3. What modifications have been made to the model unit of instruction that reflect the resources (human, time, building, technology etc.) available to your school?

No modifications will need to be made based on the resources available. The high school will have a gym and outdoor space for the walking activities.

4. Describe any other modifications that have been made to the model unit of instruction that will assist in the curricular review for your school.

No other modification will need to be made to the unit.

### **Delaware Physical Education Standards**

- Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities
- Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities
- Participates regularly in physical activity
- Achieves and maintains a health-enhancing level of physical fitness
- Exhibits responsible personal and social behavior that respects self and others in physical activity settings
- Creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction through physical activity

### **Big Idea: Fit For Life**

#### **Unit Enduring Understandings**

- Full-sentence, important statements or generalizations that specify what students should understand from the Big Ideas(s) and/or Content Standards and that are transferable to new situations.
- Everyone needs to be physically active.
- Physical fitness contributes to quality of life.
- Physical activity provides a variety of opportunity for health, enjoyment, challenge, self-expression, and/or social interaction.

#### **Unit Essential Questions**

- Open-ended questions designed to guide student inquiry and learning.
- What can I do to be physically active throughout my life?
- How can I include physical fitness into my life?
- What personal meaning do I find through participation in physical activity?

#### **Knowledge and Skills**

- Needed to meet Content Standards addressed in Stage 3 and assessed in Stage 2.

##### **Students will know...**

- Proper stretching for walking
- The health-related components of fitness specifically related to walking
- How to use a pedometer
- How many steps they need to take daily to maintain fitness levels
- The health and social benefits of walking

##### **Students will be able to...**

- Use a pedometer correctly including reading and recording data
- Explain why walking is an important lifetime activity
- Plan a walking route based on their personal environment and step needs
- Use the Nordic Walkerz correctly and demonstrate various techniques/grips

## Stage 2 – Assessment Evidence

(Evidence that will be collected to determine whether or not Desired Results are achieved)

### Suggested Unit Transfer Task(s)

An effective transfer task for ALL students should be designed to include:

- Complex, real-world, authentic applications
- Demonstration of high-level thinking with one or more facets of understanding (e.g., explain, interpret, apply, empathize, have perspective, self-knowledge)

Students will design a walking route for use outside of school use. This route will entail mile markers as well as time markers and directions. Students will discuss why they created this route, will this route become part of their weekly activity, and how do they see themselves staying active in the future.

### Rubric(s)

Targeted	Acceptable	Unacceptable
Map contains all required parts of map including detailed distances, timing, and direction.	Map contains basic required parts.	Map is not turned in or is missing required parts.
Student explains appropriateness of map route including potential safety issues. Student also personalized how map will be used now and in the future to help establish a healthy lifestyle.	Student has logical reasons for creating the map route and can explain why someone would want to make using the map a part of their daily life.	Student cannot explain how map can affect overall health and cannot relate use of map to personal lifetime health.

### Other Evidence

- Performance Assessment(s) for student understanding of the Stage 1 elements (Enduring Understandings, Essential Questions, Big Ideas) found in the Content Standards.
- Varied evidence that checks for understanding (e.g., tests, quizzes, prompts, student work samples, observations).

### Journal Prompts

- Guess Your Steps Worksheet
- Scavenger Hunt Worksheet
- Individual Walking Logs
- Teacher observation of proper pedometer usage

## Student Self-Assessment and Reflection

- Opportunities for self-monitoring learning (e.g., reflection journals, learning logs, pre- and post-tests, self-editing—based on ongoing formative assessments)
- What activities do you do after school to keep yourself healthy?
- Can you see yourself staying active another 5 years, 10 years, and 15 years?
- Semester self-reflection on walking program (non-graded).

### Stage 3– Learning Plan

(Learning activities need to align with Stage 1 and Stage 2 and show connections to prior learning)

### Key Learning Events Needed to Achieve Unit Goals

- Scaffold in order to acquire information, construct meaning, and practice transfer of understanding
- Provide ongoing opportunities for self-monitoring and self-evaluation

Lesson plans may be attached to Stage 3 and must include relevant citations and follow U.S. copyright laws.  
<http://www.umuc.edu/library/copy.shtml>

## **Unit Title: Walk for Lifetime Fitness** **Lesson 1: Introduction to Walking and Pedometers**

**Grade Cluster:** 9-12

### References

- Sweetgall, Robert. (2001) Pedometer Walking. Creative Walking Inc. Clayton, MO
- Sweetgall, Robert, Neeves, Robert. (2002) Smart Stepping Student Guide. Creative Walking inc. Clayton, MO
- **Walk4Life, (2003) A Walker’s Daily Log. Walk4Life Inc.**
- Pangrazi, Robert, Beighle, Aaron, Sidman, Cara. (2003) Pedometer Power. Human Kinetics.
- Decker, June, Mize, Monica. (2002) Walking Games and Activities. Human Kinetics.
- **Sweetgall, Robert, Dignam, John. (1986) The Walker’s Journal – Experiencing America on Foot. Creative Walking, Inc.**
- Internet sites
  - [www.thewalkingsite.com](http://www.thewalkingsite.com)
  - [www.walking.about.com](http://www.walking.about.com)

**Vocabulary/Keywords:** pedometer, target heart rate, calories, aerobic activity, exercise levels of intensity—light, moderate and vigorous

### Delaware State Standards Addressed

#3 – A physically educated person participates regularly in physical activity.

#4 – A physically educated person achieves and maintains a health-enhancing level of physical fitness.

#6 – A physically educated person understands that physical activity creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction.

**Big Idea: Fit for Life**

**Essential Questions**

- What can I do to be physically active throughout my life?
- How can I include physical fitness into my life?
- What personal meaning do I find through participation in physical activity?

**Enduring Understandings**

- Everyone needs to be physically active.
- Physical fitness contributes to quality of life.
- Physical activity provides a variety of opportunity for health, enjoyment, challenge, self-expression, and/or social interaction.

**Unit Transfer Task: Home Walking Map**

**Materials/Equipment**

- Music
- Pedometers (one for each student)
- Student pedometer log sheets—see attachment page
- Measured mile either inside or outside

**Lesson Goals**

Students will be able to: <ul style="list-style-type: none"><li>• Wear and read a pedometer correctly</li><li>• Figure out their Target Heart Rate</li><li>• Know the difference between light, moderate, and vigorous intensity</li></ul>	Students will know: <ul style="list-style-type: none"><li>• How many steps they should take daily to maintain a healthy lifestyle</li><li>• How fast they need to walk to increase their heart rate</li><li>• That walking is a form of aerobic activity</li><li>• That walking can be done throughout a lifetime</li></ul>
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**Assessment Plan**

1. Teacher observation for correct use of pedometers
2. Log steps needed to walk a mile

**Lesson Sequence**

*Warm-up*

- Worksheet – How Fast Do You Walk? – Students will calculate their walking pace into miles per hour (mph). Their pace will be calculated for a normal walk (as I state “how you walk through the hallways”) and a power walk (keeping the same pace, as fast as you can walk) for a minute.
  - Students are in groups of 3, 4, or 5 depending on the size of your class and how many stopwatches you have.
  - Materials needed – 1 stopwatch, 1 calculator, 1 pencil, and 1 handout per group. See attachment page.

- After completing handout, discuss with your students about light, moderate, and vigorous activity levels. A power walk would be considered a vigorous level of working out as long as you keep up the intensity.

### ***Introduction***

- Discuss idea that walking is an aerobic activity—which they are building up cardio-respiratory endurance through walking. They can feel their heart rate increase.
- Discuss that 2,000 steps usually equals one mile
- Explain that adults should walk 10,000 steps per day.
- Target Heart Rate (THR)—Discuss why students should know about THR as well as how to get your range and how to take your pulse.

### ***Content***

- Show students pedometers, how to put them on, how to read, rules for using pedometers—no shaking, jumping, etc., to increase step count—“**You shake it, I take it**”
- Once students have pedometers on, move to marked mile area. Have students clear pedometers and walk a mile. Allow students to walk with friends and talk but remind students that they should walk their normal stride at a medium pace (may play music during this if appropriate).

### ***Closure***

- **Record each student’s steps for the mile as they return pedometer.**
- Closure questions revolve around making connections to walking as exercise and how to incorporate it into their lives—examples:
  - How do you feel after walking today?
  - Is that the most you ever walked at one time? Could you have done more or walked faster?
  - Why do you think you should walk everyday?
  - How do you think you could get your 10,000 steps in each day?

### **Accommodations/Differentiation Ideas and Tips**

- Label each pedometer with a number and assign each number to a particular student to help keep track of them.
- Students in wheelchairs who have upper-body movement can record miles they wheel themselves.
- Students in wheelchairs can partner with walking student who pushes student—steps are recorded for both students.
- Visually impaired students walk with a partner.

**Unit Title: Walk for Lifetime Fitness**  
**Lesson 2: Scavenger Hunt**

**Grade Cluster:** 9–12

**References**

- Sweetgall, Robert. (2001) Pedometer Walking. Creative Walking Inc. Clayton, MO
- Sweetgall, Robert, Neeves, Robert. (2002) Smart Stepping Student Guide. Creative Walking inc. Clayton MO
- **Walk4Life, (2003), A Walker’s Daily Log. Walk4Life Inc.**
- Pangrazi, Robert, Beighle, Aaron, Sidman, Cara. (2003) Pedometer Power. Human Kinetics
- Decker, June, Mize, Monica. (2002) Walking Games and Activities. Human Kinetics
- **Sweetgall, Robert, Dignam, John. (1986) The Walker’s Journal – Experiencing America on Foot. Creative Walking, Inc.**

**Vocabulary/Keywords: review** – target heart rate, aerobic, calories, exercise levels of intensity—light, moderate, and vigorous

**Delaware State Standards**

#3 – A physically educated person participates regularly in physical activity.

#4 – A physically educated person achieves and maintains a health-enhancing level of physical fitness.

#6 – A physically educated person understands that physical activity creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction.

**Big Idea: Fit for Life**

**Essential Questions**

- What can I do to be physically active throughout my life?
- How can I include physical fitness into my life?
- What personal meaning do I find through participation in physical activity?

**Enduring Understandings**

- Everyone needs to be physically active.
- Physical fitness contributes to quality of life.
- Physical activity provides a variety of opportunity for health, enjoyment, challenge, self-expression, and/or social interaction.

**Unit Transfer Task: Walking Map**

**Materials/Equipment**

- Music
- Pedometers (one for each student)
- Student log record sheets

## **Lesson Goals**

Students will be able to: <ul style="list-style-type: none"><li>• Wear and read a pedometer correctly</li><li>• Discuss how participating in daily walking has helped their fitness level</li></ul>	Students will know: <ul style="list-style-type: none"><li>• That walking can be a part of daily life</li><li>• That daily walking is beneficial to a healthy life</li></ul>
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## **Assessment Plan**

1. Teacher observation for correct use of pedometers
2. Log of steps needed to walk a mile
3. Scavenger hunt answer sheets
4. Oral discussion at closure

## **Lesson Sequence**

### **Warm-up**

- Instant activity
  - Pedometers on
  - Students walk continuously for 6 minutes
  - Record steps and clear pedometer

### **Introduction**

- Discuss your rules to follow during the scavenger hunt.
- You do not need to follow the numbers in order.
- Explain that you walk everywhere as a group, i.e., up to the top of the football bleacher, down to the far end of the tennis courts as well as all the way out to center field.
- You cannot share answers with other groups.
- At the end of the hunt, all of your group steps will be added up to find the winner.
- Depending on your school situation, you can create a scavenger hunt within the building too.

### **Content**

- Clear pedometers.
- Complete scavenger hunt activity—see attachment page.

### **Closure**

- Cool down—have student go through stretching series.
- Closure questions revolve around how walking is a part of our daily life and how we can make it even more so—examples:
  - Thinking about the number of steps you take to walk a mile, how far do you estimate you walked today?
  - What do you think would happen to your body if you walked every day?

## **Accommodations/Differentiation Ideas and Tips**

- The scavenger hunt has students moving at different times to different places. Keep visible to all students. Make the hunt interesting to your students.
- Label each pedometer with a number and assign each number to a particular student to help keep track of them.
- Student in wheelchairs who have upper-body movement can record miles they wheel themselves.

- Students in wheelchairs can partner with a walking student/aide who assists in pushing the student where needed—steps are recorded for both students.
- Visually impaired students may walk with a partner.

**Unit Title: Walk for Lifetime Fitness**  
**Lesson 3: How many calories do you burn walking**

**Grade Cluster:** 9–12

**References**

- Sweetgall, Robert. (2001) Pedometer Walking. Creative Walking Inc. Clayton, MO
- Sweetgall, Robert, Neeves, Robert. (2002) Smart Stepping Student Guide. Creative Walking inc. Clayton MO
- Walk4Life Inc. (2003) A Walker’s Daily Log. Walk4Life Inc.
- Pangrazi, Robert, Beighle, Aaron, Sidman, Cara. (2003) Pedometer Power. Human Kinetics
- Decker, June, Mize, Monica. (2002) Walking Games and Activities. Human Kinetics
- Sweetgall, Robert, Dignam. (1986) The Walker’s Journal – Experiencing America on Foot. Creative Walking Inc.

**Vocabulary/Keywords:** calorie, caloric intake, caloric expenditure, metabolism—**review** exercise levels of intensity—light, moderate, vigorous

**Delaware State Standards**

#3 – A physically educated person participates regularly in physical activity.

#4 – A physically educated person achieves and maintains a health-enhancing level of physical fitness.

#6 – A physically educated person understands that physical activity creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction.

**Big Idea: Fit for Life**

**Essential Questions**

- What can I do to be physically active throughout my life?
- How can I include physical fitness into my life?
- What personal meaning do I find through participation in physical activity?

**Enduring Understandings**

- Everyone needs to be physically active.
- Physical fitness contributes to quality of life.
- Physical activity provides a variety of opportunity for health, enjoyment, challenge, self-expression, and/or social interaction.

**Unit Transfer Task: Walking Map**

**Materials/Equipment**

- Music
- Pedometers (one for each student)
- Student log record sheets
- LCD projector
- Computer with internet access – if necessary schedule Media Center for students to have access

## Lesson Goals

<p>Students will be able to:</p> <ul style="list-style-type: none"><li>• Wear and read a pedometer correctly</li><li>• Discuss how participating in daily walking has helped their fitness levels</li><li>• Evaluate their Caloric Intake vs. Caloric Expenditure</li><li>• Go on the internet and find various websites to find out their calories in and calories out</li></ul>	<p>Students will know:</p> <ul style="list-style-type: none"><li>• Walking is an activity that helps develop lifetime fitness</li><li>• Moderate to vigorous walking will burn calories</li><li>• Calories In vs. Calories Out determines weight loss or gain</li></ul>
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## Assessment Plan

1. Teacher observation for correct use of pedometers.
2. Oral discussion of why walking is a lifetime fitness activity.

## Lesson Sequence

### Warm-up

- Instant activity
  - Worksheet – How many calories do you burn by walking? See attachment page.
  - Materials needed: 1 worksheet per student, pencil.
  - In two groups, have students lined up across the gym. The second group lined up behind the first. On your command, have the first group walk at a normal pace for 10 seconds. Have each student count his or her steps. Repeat with the second group. See handout for mph.
  - Have students set up again and walk at a faster pace. See handout for mph.
  - Finally have students walk as fast as they can. See handout for mph.

### Introduction

- Begin appropriate stretch routine as introduction of lesson is discussed.
- Discuss various walking sites on the web.
- Using an LCD projector, bring up the various sites and give details of each to students.
- Explain about homework of Walking Map and details wanted.
- Have students start looking around house, basement, or garage for designing Walking sticks.

### Content

- Explain about calories in vs. calories out.
- Look into common foods and the amount of exercise needed to burn off those calories. Look at handout – Common Fast or Snack Foods, Calories and Activity Required
- Website to review with students:
  - **CALORIES OUT** – sites to calculate calories burned after exercising:
    - ♦ <http://calorielab.com/burned/>
    - ♦ [www.walking.about.com/cs/howtoloseweight/a/howcalburn.htm](http://www.walking.about.com/cs/howtoloseweight/a/howcalburn.htm)
    - ♦ [www.walking.about.com/od/calorie1/calorie\\_calculators.htm](http://www.walking.about.com/od/calorie1/calorie_calculators.htm)
    - ♦ [www.everydayhealth.com/calories-burned-walking.htm](http://www.everydayhealth.com/calories-burned-walking.htm)
  - **CALORIES IN** – sites listing amount of calories in various foods:
    - ♦ <http://www.howmanycaloriesin.com/>
    - ♦ [http://www.freedieting.com/tools/calories\\_in\\_food.htm](http://www.freedieting.com/tools/calories_in_food.htm)

- **Smart Mouth website** – share this site with students. Great inactive site for students to learn and play. Demonstrate a few areas for the students.  
<http://www.cspinet.org/smartmouth/>

### **Wellness Center – Nutritionist**

Have your Wellness Center Nutritionist come in and have an Eat This and Not That session. This session is created to show students examples of what 200 calories of different foods looks like. For example, have 200 calories of potato chips on one plate and 200 calories of rice cakes on another. Have a small bag of M&Ms, and for each piece you eat, you have to walk the length of one football field to burn off those calories. Use choices from the handout. Students can eat the healthy snack foods when activity is finished.

See handout Common Fast or Snack Food, Calories Consumed and Activity Required to burn off.

#### ***Closure***

- Handout for homework: Food Labels—students are asked to examine a food item that they consumed. Attach label to handout. Answer questions relating to that label. Collect next day.
- Assign walking map project: Your project assignment will consist of you designing a walking map that you can walk around your house/neighborhood. With all maps, show markers such as  $\frac{1}{4}$  mile,  $\frac{1}{2}$  mile,  $\frac{3}{4}$  mile; the direction to walk; and approximately how long one lap will take. Be creative.

### **Accommodations/Differentiation Ideas and Tips**

- Student in wheelchairs who have upper-body movement can record miles they wheel themselves.
- Students in wheelchairs can partner with walking student who pushes student—steps are recorded for both students.
- Visually impaired students walk with partner.
- If you are a CATCH school, this would be a good lesson for your nutritionist/cafeteria worker to introduce or reiterate the Go, Slow, Whoa foods.

**Unit Title: Walk for Lifetime Fitness**  
**Lesson 4: Nordic Walking**

**Grade Cluster:** 9–12

**References**

- Sweetgall, Robert. (2001) Pedometer Walking. Creative Walking Inc. Clayton, MO
- Sweetgall, Robert, Neeves, Robert. (2002) Smart Stepping Student Guide. Creative Walking inc. Clayton MO
- **Walk4Life, Inc. (2003) A Walker’s Daily Log. Walk4Life Inc.**
- Pangrazi, Robert, Beighle, Aaron, Sidman, Cara. (2003) Pedometer Power. Human Kinetics
- Decker, June, Mize, Moncia. (2002) Walking Games and Activities. Human Kinetics
- Sweetgall, Robert, Dignam. (1986) **The Walker’s Journal** – Experiencing America on Foot. Creative Walking, Inc.
- [www.anwa.com](http://www.anwa.com) - American Nordic Walking Association

**Vocabulary/Keywords:** Nordic walking, trekking, 2-wheel drive vs. 4-wheel drive, double pole plant, unison

**Delaware State Standards**

#3 – A physically educated person participates regularly in physical activity.

#4 – A physically educated person achieves and maintains a health-enhancing level of physical fitness.

#6 – A physically educated person understands that physical activity creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction.

**Big Idea: Fit for Life**

**Essential Questions**

- What can I do to be physically active throughout my life?
- How can I include physical fitness into my life?
- What personal meaning do I find through participation in physical activity?

**Enduring Understandings**

- Everyone needs to be physically active.
- Physical fitness contributes to quality of life.
- Physical activity provides a variety of opportunity for health, enjoyment, challenge, self-expression, and/or social interaction.

**Unit Transfer Task: Walking Map**

**Materials/Equipment**

- Music
- Pedometers (one for each student)
- Student log record sheets
- Nordic walking poles – store purchased or try making with wooden dowels and straps

## Lesson Goals

Students will be able to: <ul style="list-style-type: none"><li>• Wear and read a pedometer correctly</li><li>• Use Nordic walking poles and perform proper technique and skills while walking</li><li>• Reflect on how walking can be a lifetime fitness activity</li></ul>	Students will know: <ul style="list-style-type: none"><li>• Correct procedure and technique when Nordic walking</li><li>• Proper terminology used</li><li>• Walking is an activity that helps develop lifetime fitness</li></ul>
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## Assessment Plan

1. Teacher observation for correct use of pedometers
2. Homework questions

## Lesson Sequence

### Warm-up

- Instant activity
  - Pedometers on and continuous walk for 5 minutes
  - Record steps and clear pedometers

### Introduction – History of Nordic Walking

- Nordic walking was designed to help winter Nordic skiers stay in shape in the off-season.
- 1997 Finland – Company Exel designed special fitness walking poles. The poles included specially designed wrist straps, which were key to the technique and are still used today.
- Tom Rutlin from USA, in 1988, created Exerstriding, which had similar poles without the wrist straps.

### Nordic Walking vs. Trekking

- Nordic Walking – poles are engaged to the sides and behind the body while walking, tips of the poles are used to push off the ground to engage the whole body, poles are in two sections.
- Trekking – Poles are used in front of your body to absorb stress from joints, used for balance and stability on steeper slopes and poles are usually 3 sections.
  - Have students become familiar with the different types of Nordic walking poles—Leki, Nordic Walkerz
  - Benefits – Time efficient and less stress, total body workout, 40% more calories burned—over 400 calories per hour while normal walking 280 calories per hour.

### Common Mistakes

- Staying in “2-wheel drive” – not involving upper-body with poles
- Planting the poles too far from body – lower effectiveness of Nordic walking
- Walking with closed hands – does not allow for proper blood circulation
- Walking with open hands – not getting power from push off

### Content

- Depending on the amount of poles you have, team up the students in pairs. This will give them a true feeling of the difference between the two, that is power walking and Nordic walking. During the activity, one student is power walking; the other student will use the poles. Then repeat the activity and see/feel the difference.

- Activity - Students will walk a designated course. Make sure the course entails flat surfaces, i.e., walking path, parking lot, tennis courts, grassy area, and incline or hills. This will allow the students to really use their poles.
- Being on a block schedule, my students will walk a course that would be 20 minutes. Then get a drink and switch from power walking to Nordic walking or vice versa.

### *Closure*

- Discussion – How does Nordic walking differ from power walking?
  - Did you work harder, go faster during your walk?
  - Is this an activity that you enjoyed and would continue?
  - Instead of buying a pair of Nordic walking poles, could you make a pair at home and with what materials would you need?
  - Could you use the Nordic walking poles on the home course your designing?

### **Accommodations/Differentiation Ideas and Tips**

- Students in wheelchairs who have upper-body movement can record miles they wheel themselves. Adjust the poles for the students; they can use the poles to the sides of the wheelchairs.
- Students in wheelchairs can partner with walking student who pushes student—steps are recorded for both students.
- Visually impaired students walk with partner.

## ATTACHMENT PAGE

### Walk for Fitness - Scavenger Hunt Pedometer Activity

The following is an example of what we use at Brandywine High School:

Design a course that will have your students walking all over your campus. Make sure they stay visible to you. Give them an adventure. If the identifiable area you are using does not have a sign or word, just place an index card with a number on it. Just do not make it 1–10.

Prior to handing out the worksheet to the students, walk the course yourself to get an idea of how long it should take as well as how many steps.

Do not forget to remind them that everyone needs to walk to the spot and that a total step count will be recorded for each member of the group as well as a group total.

Now have your students get into groups of 2 or 3. Hand them a Scavenger Hunt worksheet that you created of your campus with all of your questions on them. Have a spot for them to place their names as well as a spot to place their answers. This will hold them accountable. Now add a few extra minutes to the time it took you, and have the students complete the sheet in that time. Give bonus points for groups who get under that time and demerits for groups who go over the time. Give out prizes for students who completed the worksheet with all correct answers and steps. Make it fun and be creative.

Please adapt to your school.

1. When walking into the gym lobby, what is the name of the wrestling coach who is on a plaque by the Fitness Room?
2. On the Fitness Trail, there is a tree dedicated to a former lacrosse/soccer player. What was that player's name?
3. On the back softball field there is a yellow equipment box. What word is on that box?
4. **On the football field there is an announcer's** box at the top of the bleachers. What number is on the door?
5. On the tennis courts one of the courts has a number on the net. What is that number?
6. **At the pitcher's mound** of the baseball field, what number is on the rubber?
7. On the football field, **visitor's side bleachers**, what number is at the top?
8. On the football/lacrosse practice field, what number is on the snow fence?
9. On the field hockey field, what is the number on the **player's side**?
10. If you would walk to the varsity softball field, there is a large rock behind home plate. Can you find the number and record it?

#### Scavenger Hunt Answers

- |                 |       |
|-----------------|-------|
| 1. Helmbreck    | 8.0   |
| 2. Jay Spelecie | 9.58  |
| 3. 52           | 10.27 |
| 4. 91           |       |
| 5. 4            |       |
| 6. 36           |       |
| 7. 41           |       |

## Resources and Teaching Tips

### Resources

- Include a variety of resources (texts, print, media, and web links) that best supports the unit.
- Sweetgall, Robert. (2001) Pedometer Walking. Creative Walking Inc. Clayton, MO
- Sweetgall, Robert, Neeves, Robert. (2002) Smart Stepping Student Guide. Creative Walking inc. Clayton, MO
- **Sweetgall, Robert, Dignam, John. (1986) The Walker's Journal – Experiencing America on Foot.** Creative Walking, Inc.
- NASPE (2005) Physical Best Activity Guide: Elementary Level. Human Kinetics Champaign, IL
- Walk4Life Inc., (2003) **A Walker's Daily Log.** Walk4Life, Inc.
- Pangrazi, Robert, Beighle, Aaron, Sidman, Care. (2003) Pedometer Power. Human Kinetics
- Decker, June, Mize, Monica. (2002) Walking Games and Activities. Human Kinetics
- [www.creativewalking.com](http://www.creativewalking.com)
- [www.aahperd.org/naspe](http://www.aahperd.org/naspe)
- <http://walking.about.com/cs/measure/a/webwalkingusa.htm>
- [www.webwalking.com](http://www.webwalking.com)
- [www.discoverytrail.org](http://www.discoverytrail.org)
- [www.anwa.us](http://www.anwa.us)

### Teaching Tips

- Provide tips to help teachers identify and correct student misunderstandings and weaknesses.
1. When teaching this unit, you may want to see if you can get a volunteer to help on the days you introduce pedometers to cut down time.
  2. Note that this unit has two introductory lessons and then two more that should be spaced throughout the rest of the semester. Lessons 3 and 4 are used at two different places during the rest of the semester to revisit walking with the students and to reinvigorate the school-wide program. These two lessons use Walker Olympics as the base, and all steps are added to school-wide campaign to give a mileage boost to the project.
  3. Work with social studies and math teachers to incorporate developmentally appropriate math and social studies/geography skills and information.
  4. Be sure you have introduced the health-related components of fitness to your students prior to this unit. This will simplify making the connections to aerobic fitness and flexibility.
  5. If you are a CATCH school, integrate information with other areas within the school, i.e., using cafeteria personal to help with calorie in-calorie out lesson.

## Accommodations/Differentiation

- Stage 2 and 3 allow students to demonstrate understanding with choices, options, and/or variety in the products and performances without compromising the expectations of the Content Standards.
- Describe how instruction may be varied to address differences in readiness, interest, and/or learning profiles.
- Student in wheelchairs who have upper-body movement can record miles they wheel themselves.
- Students in wheelchairs can partner with walking student who pushes student—steps are recorded for both students.
- Visually impaired students walk with partner.

## Design Principles for Unit Development

Please check the design principles below that are embedded within the unit

- International Education** - the ability to appreciate the richness of our own cultural heritage and that of other cultures and to provide cross-cultural communicative competence.
- Universal Design for Learning** - the ability to provide multiple means of representation, expression, and engagement to give learners various ways to acquire and demonstrate knowledge.
- 21<sup>st</sup> Century Learning** – the ability of to use skills, resources, and tools to meet the demands of the global community and tomorrow’s workplace. (1) **Inquire, think** critically, and gain knowledge, (2) Draw conclusions make informed decisions, apply knowledge to new situations, and create new knowledge, (3) Share knowledge and participate ethically and productively as members of our democratic society, (4) Pursue personal and aesthetic growth. (AASL, 2007)

(Briefly explain how design principle(s) are embedded within the unit design.)

Multiple learning strategies are incorporated in this unit that address varied learning styles.

## Technology Integration

The ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information

Students will utilize charts, maps, computers, pedometers, and calculators to solve problems and chart progress in this unit.

## Connections to Other Areas

Suggestions for integrating instruction with other curricular areas, school support services (health services, counseling, nutrition services, and school climate) families and communities.

- Mathematics
- Social studies
- Family and consumer sciences
- Could connect to local parks, recreation areas, and other community partners

## ATTACHMENT PAGE

### Lesson 1



"HOW FAST DO YOU WALK.doc"



"Pedometer Numbers.xls"



"How Fast do you walk - class summar

### Lesson 2 - \*Scavenger Hunt directions on page 15



"DID YOU KNOW.doc"

### Lesson 3



"Common foods and Energy Balance.xls"



"Common Foods,Calories consum



"Food Label worksheet.xls"



"calories sites.doc"

### Lesson 4



"Walking Energy Expenditure.xls"



"Copy of HOW MANY CALORIES DO YOU B

EXTRA – Handouts for Target Heart Rate if you want to use with Walking Unit.



"6 sec pulse count.doc"



"TARGET HEART RATE.doc"



"Target Heart Rate weekend worksheet



"TARGET HEART RATE worksheet.doc"



"MEASURING YOUR HEART RATE.doc"



"PULSE CHECK.doc"

## Delaware Model Unit Gallery Template: Physical Education

**Unit Title: Components of Fitness**

**Designed by: Kristen Eaton/ Jennifer Kalinowski**

**Grade Cluster: 9-12**

**Time Frame: (Number of lessons) 4 weeks**

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### Summary of Unit

**This unit introduces students to fitness components. Each lesson focuses specifically on one component. The fitness components that students will study are cardio-respiratory endurance, muscular endurance, muscular strength, flexibility, and body composition. Lessons will be taught in sequence and can be revisited in other lessons throughout the year. Previous fitness components are revisited and reviewed in each lesson. In addition, students are given the opportunity for social interaction and responsible behavior. They will also recognize activities that can be enjoyable life-long activities.**

### Stage 1 – Desired Results

What students will know, be able to do and understand

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#### Delaware Physical Education Standards

- Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities
- Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities
- Participates regularly in physical activity
- Achieves and maintains a health-enhancing level of physical fitness
- Exhibits responsible personal and social behavior that respects self and others in physical activity settings
- Creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction through physical activity

**Big Idea: Fit For Life**

### **Unit Enduring Understanding(s)**

- Physical Fitness contributes to quality of life.
- Physical activity provides a variety of opportunities for health, enjoyment, challenge, self-expression and or social interaction.

### **Unit Essential Questions(s)**

- What personal meaning do I find through participation in physical activity?
- How can I include physical fitness into my life?

### **Knowledge and Skills**

#### **Students will know...**

- Fitness components and which body parts are affected when performing fitness component activities
- Fitness activities can be fun
- How fitness components promote a healthy lifestyle

#### **Students will be able to...**

- Use activities that students enjoy (activities will naturally improve individual fitness components)
- Demonstrate a variety of activities
- Participate in class discussion that will center around how fitness components promote a healthy lifestyle

## **Stage 2 – Assessment Evidence**

Evidence that will be collected to determine whether or not Desired Results are achieved

### **Suggested Unit Transfer Task(s)**

APPLICATION

#### ***Create a Birthday Wish List***

Imagine that your parents have said you can have any piece of equipment or game that you want for your birthday. You must choose equipment or games that improve different fitness components. Students will be given a catalog with equipment and games, and must cut out the equipment or games they want, and paste the pictures to their wish list worksheet. Students will also have pictures of variety of body parts. The task is to identify which fitness component will be improved by using the equipment or games chosen, as well as identifying which

body part is being used during the activity.

### Rubric(s)

	<b>Targeted</b>	<b>Acceptable</b>	<b>Unacceptable</b>
<b>Fitness Component</b>	Students can identify all five components in relation to the pieces of equipment or games they have chosen.	Students can identify some of the five components in relation to the pieces of equipment or games they have chosen.	Students cannot identify any of the fitness components in relation to the equipment or games they have chosen.
<b>Body Part</b>	Students can identify all body parts that will be focused on by using chosen equipment and games.	Students can identify some body parts that will be focused on by using chosen equipment and games.	Students cannot identify any body parts that will be focused on by using chosen equipment and games.

### Other Evidence

- Teacher observations
- Exit slips
- Class discussion
- Peer assessment

### Student Self-Assessment and Reflection

- Oral responses to teacher questions
- Signaled response (thumbs up/down)

## Stage 3 – Learning Plan

Learning activities need to align with Stage 1 and Stage 2 and show connections to prior learning

### Key learning events needed to achieve unit goals

- Scaffold in order to acquire information, construct meaning, and practice transfer of understanding
- Provide ongoing opportunities for self-monitoring and self-evaluation

Lesson plans may be attached to Stage 3 and must include relevant citations and follow U.S. copyright laws. <http://www.umuc.edu/library/copy.shtml>

### Unit Title: Fitness Components

#### Lesson 1: Cardio Respiratory Endurance

#### Grade Cluster: 9-12

**References:** *Fitness for Children* by Curt Hinson

**Vocabulary/ Keywords:** cardiorespiratory endurance, pulse, heart rate, prediction

#### Delaware State Standards Addressed

#4- Achieves and maintains a health-enhancing level of physical fitness.

#6- Creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction through physical activity.

#### Big Idea: Fit for Life

#### Enduring Understanding(s)

- Physical Fitness contributes to quality of life.
- Physical activity provides a variety of opportunities for health, enjoyment, challenge, self-expression and or social interaction.

#### Essential Questions(s)

- What personal meaning do I find through participation in physical activity?
- How can I include physical fitness into my life?

#### Unit Transfer Task: Birthday Wish list

#### Materials/Equipment:

4 cones  
chart paper  
jump ropes

## Lesson Goals

- Locomotor movements, find pulse, recognize changes in heart rate

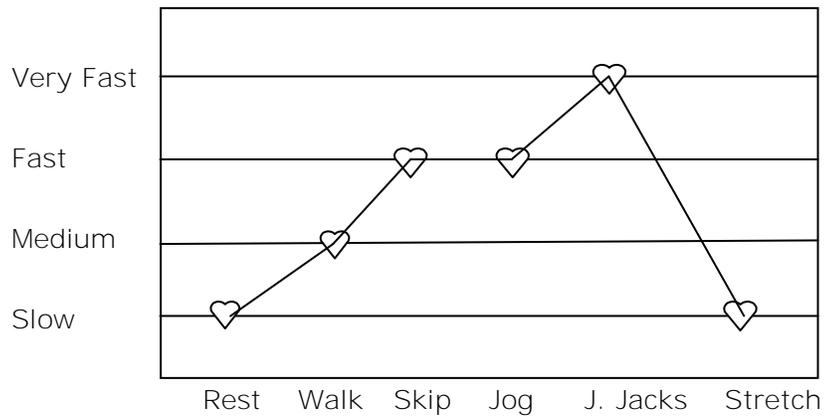
<p>Students will be able to:</p> <ul style="list-style-type: none"><li>• Find pulse</li><li>• Demonstrate locomotor movements</li><li>• Take resting and active heart rate</li><li>• Recall activities that increase heart rate</li></ul>	<p>Students will know:</p> <ul style="list-style-type: none"><li>• Why heart rate increases and decreases</li><li>• Jumping rope can increase heart rate</li><li>• Locomotor movements can increase heart rate</li></ul>
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## Assessment Plan:

- Student performance of locomotor movements
- Teacher observation of finding pulse
- Student answers to questions about change in heart rate
- Exit slip- see attachment A

## Lesson Sequence:

- Introduction
  - *Jump and Jog*- Half of the students jog around the perimeter of the gym, marked by cones. The other half stay in the middle and jump rope. On the signal students will switch roles, continuing with the activity for a few rotations.
  - Teacher will discuss with students the importance of exercise as part of a healthy lifestyle, and a healthy heart. Discuss with students that they just performed two cardiorespiratory endurance activities. Explain that cardio respiratory endurance is a fitness component, and that cardio has to do with the heart and respiratory has to do with lungs, and endurance means to do something for a long time. Explain that when we exercise our heart rate increases, works harder, and is becoming healthier.
  - Ask students which fun activities and sports make our heart work harder.
  - Find Pulse- discuss that heart rate is slow right now because you are not active.
  - Prediction- using information we just discussed, make a prediction of what will happen to your heart rate as we become active during the lesson
- Content- *Cardiograph*
  - Students will perform locomotor movements and exercises on the signal
  - After each movement or exercise, students will regroup and discuss results
  - **Students will be given the choice of "slow, medium, fast, or very fast" in regards to their heart rate**
  - Points will be plotted on the chart and students will be able to see the changes in heart rate on the chart. See example below.



- Closure
  - Students will walk slowly to slow their heart rate. After slow walking students will do standing stretches then sitting stretches.
  - Review with students what the hearts represent on the chart. Why are some hearts higher and some are lower? Why is the stretching heart low?
  - Ask students what exercises they do that are fun.
  - Hand out exit slips, complete and collect.

### **Accommodations/Differentiation**

1. Students can lay jump ropes on the floor and jump over if they cannot jump rope.
2. For students who are having difficulty performing cardiorespiratory activities pair them with another student who can encourage them to do their best.

**Attachment A**

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Directions: List 5 activities that will increase your heart rate.

**Unit Title: Fitness Components**

**Lesson 2: Cardio respiratory Endurance- Walking**

**Grade Cluster: 9-12**

**References:** *PE Central*

**Vocabulary/ Keywords:** pulse, heart rate (review from previous unit)

**Delaware State Standards Addressed**

- #4- Achieves and maintains a health-enhancing level of physical fitness.
- #6- Creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction through physical activity.

**Big Idea: Fit for Life**

**Enduring Understanding(s)**

- Physical Fitness contributes to quality of life.
- Physical activity provides a variety of opportunities for health, enjoyment, challenge, self-expression and or social interaction.

**Essential Questions(s)**

- What personal meaning do I find through participation in physical activity?
- How can I include physical fitness into my life?

**Unit Transfer Task: Birthday Wish list**

**Materials/Equipment:**

4 cones/locomotor signs  
Tickets

**Lesson Goals:** Moving responsibly, walking quickly to increase heart rate, working cooperatively

Students will be able to: <ul style="list-style-type: none"><li>• Find pulse</li><li>• Demonstrate responsible behavior while walking quickly</li><li>• Count the number of laps walked</li></ul>	Students will know: <ul style="list-style-type: none"><li>• That heart rate will increase while walking</li><li>• Working cooperatively can be fun and rewarding</li></ul>
---	--

**Assessment Plan:**

- Student performance of locomotor movements
- Teacher observation of cooperative behavior
- Teacher observation of cooperative counting
- Question and answer self-assessment

**Lesson Sequence:**

- Introduction
  - Teacher will review how to take pulse, and how heart rate increases and decreases depending on activity.
  - ***Around the Block***- students will move clockwise around the four cones. As they pass each cone they will perform the locomotor movement on each cone (skip, gallop, jog, walk).
- Content- ***Walking***
  - Discuss with students that walking is a cardiorespiratory endurance activity that can be enjoyable and is a lifetime fitness activity.
  - Explain to students that walking cooperatively, or with partners can make the activity more fun.
  - Students will briskly walk laps around the gym, collecting a ticket each time they pass the teacher.
  - At the end of the activity students will check their pulse. After checking pulse students will count tickets cooperatively to see how many laps the class walked together
- Closure
  - Students will walk slowly to slow their heart rate.
  - **Discuss with students how the number for "Willie Worm" would have been different if we walked this slowly the entire time**
  - **Ask students to give a "thumbs up" if they walked quickly today.**
  - **Ask students to give a "thumbs up" if their heart rate increased when they walked.**

**Accommodations/ Differentiation:**

1. If a student has difficulty walking briskly, they can go at a pace that is comfortable for them.
2. Second grade students can count their own tickets, then numbers can be added together to integrate math.

**Unit Title: Fitness Components**

**Lesson 3: Muscular Endurance**

**Grade Cluster: 9-12**

**References:** *Fitness for Children* by Curt Hinson

**Vocabulary/ Keywords:** muscular endurance, rowing, bicep curls

**Delaware State Standards Addressed**

#4- Achieves and maintains a health-enhancing level of physical fitness.

#6- Creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction through physical activity.

**Big Idea: Fit for Life**

**Enduring Understanding(s)**

- Physical Fitness contributes to quality of life.
- Physical activity provides a variety of opportunities for health, enjoyment, challenge, self-expression and or social interaction.

**Essential Questions(s)**

- What personal meaning do I find through participation in physical activity?
- How can I include physical fitness into my life?

**Unit Transfer Task: Birthday Wishlist**

**Materials/Equipment:**

Parachute  
light weight ball  
beanbags

**Lesson Goals:** using equipment responsibly, fun activities can increase muscular endurance, working cooperatively, identify muscles being used

<p>Students will be able to:</p> <ul style="list-style-type: none"><li>• Demonstrate a variety of movements</li><li>• Use equipment responsibly</li><li>• Identify muscles/muscles groups being focused on during activity</li></ul>	<p>Students will know:</p> <ul style="list-style-type: none"><li>• That proper use of equipment will increase muscular endurance</li><li>• Muscular endurance can be increased by using atypical fitness equipment</li></ul>
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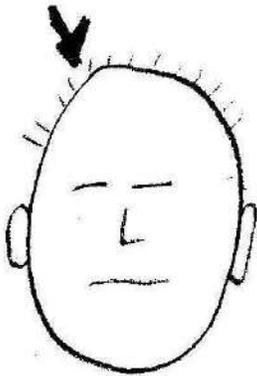
### **Assessment Plan:**

- Teacher observation of movement skills
- Discussion questions
- Student identification of muscles/muscle groups being used
- Exit Card- See attachment B
  
- Introduction
  - **All Fours Hockey Warm-up-** Students will pair up and face each other in a push-up position. The object is to score and block the bean bag, as if playing hockey by maintaining the push-up position. After activity ask students which muscles were being used, and explain that they were using muscular endurance. Teacher will discuss with students the definition of muscular endurance (being able to do an activity that involves using the muscles for a long time).
  - Explain that muscular endurance is a fitness component, and it is part of having a healthy body. The longer we can perform an activity, the more muscular endurance we have, and it also helps to make our muscles stronger. Give examples, engage students in discussion about what familiar activities involve muscular endurance.
  
- Content- Spread parachute out on the floor and have students find their own space on the parachute. Students will perform 10-20 repetitions of the following exercises:
  - standing facing the parachute-alternate reaching for the sky and touching their toes
  - standing facing the parachute- make big waves, small waves
  - continue with big and small waves, but alternate left and right arms
  - alternating arms, travel in a specific direction using locomotor skills such as fast walk, jog, skip, gallop
  - using both hands, slide left or right on the signal
  - seated facing the parachute do sit-ups
  - seated facing the parachute bicep curls, rowing
  - stand up again, and students will work cooperatively, trying to move a ball slowly around the parachute in a circle
  
- Closure
  - Discussion of muscles that were used during activities. Ask students which muscle or group of muscles were used for a long time. Ask students why it is important for us to have muscular endurance. Discuss with students that making muscles stronger can be fun if we use equipment that we can have fun with.
  - Hand out exit card, complete, collect
    - Circle the muscle group you used the most today  
(picture of arm, legs, feet, head)

**Accommodations/ Differentiation:**

1. Students who have difficulty performing locomotor movements can step away from the parachute and move at their own pace.
2. Modify the number of repetitions depending on age, skill level.

Directions: Circle the muscle groups you used the most today.



## Unit Title: Fitness Components

### Lesson 4: Muscular Strength

#### Grade Cluster: 9-12

**References:** *Fitness for Children* by Curt Hinson

**Vocabulary/ Keywords:** muscular strength, rowing (review), bicep curl (review), deltoid lift, press, overhead triceps extension, shrug

#### Delaware State Standards Addressed

#4- Achieves and maintains a health-enhancing level of physical fitness.

#6- Creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction through physical activity.

#### Big Idea: Fit for Life

#### Enduring Understanding(s)

- Physical Fitness contributes to quality of life.
- Physical activity provides a variety of opportunities for health, enjoyment, challenge, self-expression and or social interaction.

#### Essential Questions(s)

- What personal meaning do I find through participation in physical activity?
- How can I include physical fitness into my life?

#### Unit Transfer Task: Birthday Wish list

#### Materials/Equipment:

2 tennis balls for each student  
Fitness cards for secret exercises  
Cones

**Lesson Goals-** moving responsibly, increasing muscular strength, identify muscles being used

<p>Students will be able to:</p> <ul style="list-style-type: none"><li>Identify which muscle groups are being used</li><li>Demonstrate muscular strength exercises</li></ul>	<p>Students will know:</p> <ul style="list-style-type: none"><li>Muscular strength can be increased by using light weight objects and objects they are familiar with</li><li>Muscular strength can be increased by repeating exercises</li></ul>
--	--

### **Assessment Plan:**

- Teacher observation of movement skills
- Discussion questions
- Student identification of muscles/muscle groups being used
- Exit Card

### **Lesson Sequence:**

- Introduction-
  - **Crazy Cones**-class will be divided in half, with half of the students setting the cones upright while the other half turns them on their side. After 30 to 45 seconds groups switch roles. The activity continues with the roles continually switching.
  - Discuss with students that they performed a cardiorespiratory endurance activity while using cooperation skills. Explain that cardiorespiratory endurance activities often involve muscular endurance and muscular strength.
  - Review muscular endurance, and discuss muscular strength. Explain to students that muscular strength means to make muscles stronger, and that when we repeat an exercise many time we are increasing our muscular strength.
- Content
  - **Ball exercises**- scatter students around the area performing various locomotor movements and holding a beanbag in each hand. On the signal students will stop and perform a muscular strength exercise. With each exercise that is performed ask students to point to the muscles being used. Use the following:
    1. Bent over rowing
    2. Biceps Curl
    3. Deltoid lift
    4. Overhead press
    5. Overhead triceps extension
    6. Shoulder shrug
    7. Single-arm rowing
    8. Upright rowing
  - **Group Secret Exercises**- Place the fitness cards face down in the middle of the area. Students will use locomotor movements to travel around the area. When the signal is given students will stop and one student is chosen to turn over a card in the center. The exercise card is read aloud and students perform the exercise. Continue with the activity using different locomotor movements, and choosing a different student to turn a card over each time. See attachment C
- Closure
  - Review the meaning of muscular strength. Explain to students that heavy **objects don't have to be used to get stronger.**

- Ask for volunteers to demonstrate with a tennis ball, an exercise that they can perform to increase muscular strength. As the exercises are being demonstrated have students point (on their own body) the muscles that are being used.
- Hand out, complete, collect exit card  
(Draw something from your house that you can use to perform muscular strength exercises with. Be sure to pick something that is not too heavy for you.)

**Accommodations/Differentiation**

1. Tennis balls are used to teach technique because they are light weight. After proper form has been developed, let students experiment with different objects of different weight.

## **Unit Title: Fitness Components**

### **Lesson 5: Flexibility**

#### **Grade Cluster: 9-12**

**References:** *Fitness for Children* by Curt Hinson

**Vocabulary/ Keywords:** flexibility

#### **Delaware State Standards Addressed**

#4- Achieves and maintains a health-enhancing level of physical fitness.

#6- Creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction through physical activity.

#### **Big Idea: Fit for Life**

#### **Enduring Understanding(s)**

- Physical Fitness contributes to quality of life.
- Physical activity provides a variety of opportunities for health, enjoyment, challenge, self-expression and or social interaction.

#### **Essential Questions(s)**

- What personal meaning do I find through participation in physical activity?
- How can I include physical fitness into my life?

#### **Unit Transfer Task: Birthday Wish list**

#### **Materials/Equipment:**

Flexibility tag cards

Poster with stretches

**Lesson Goals:** moving responsibly, increasing flexibility, learning new stretches

Students will be able to: <ul style="list-style-type: none"><li>• Perform stretching activities</li><li>• Identify muscles being stretched</li></ul>	Students will know: <ul style="list-style-type: none"><li>• Stretching increases flexibility</li><li>• Flexibility increases movement</li><li>• Stretching is important before and after activity</li></ul>
--	---

#### **Assessment Plan:**

- Teacher observation of stretching exercises
- Discussion of muscles being used when performing stretches

- Assess other students when stretching, and count for them

### **Lesson Sequence:**

- Introduction
  - Discuss with students that being flexible means being able to move the muscles in a wide range of motion. Flexibility is important to helping to strengthen the muscles, and perform more activities. As part of a healthy lifestyle stretching should be done before and after activity. Explain that stretches should be held, and how a stretch should and should not feel.
  - **Group Flexibility Circuit-** have students stand in a large circle and demonstrate different stretches, as well as proper stretching technique. As the teacher does the stretches students should follow along, performing the same. Teacher should demonstrate stretches that will be used in the lesson.
- Content
  - **Flexibility Tag-** Scatter students throughout the area, giving half flexibility tag cards. When signal is given students with tag cards attempt to tag someone without a card. When tagged, the child takes the tag card from the tagger and performs the stretch written on the card. The tagger can assess the other student to be sure they are performing the stretch correctly, as well as counting for them. The stretchers then become taggers and try to tag someone who does not have a card.  
See attachment D
  - **Stretch and Go-** Create a stretching poster and teach students the stretches on the poster. Hang the poster where it is visible to all students. On the signal students will perform a locomotor movement around the area. When the signal is given, students will stop and one student is selected to choose a stretch from the poster. The student leads the class in that stretch. The activity continues with a new locomotor movement and another leader.  
See attachment E
- Closure
  - Review correct procedures for stretching and how long stretches should be held. Ask for volunteers to demonstrate a stretch they learned today.
  - Stretching check list: as each student volunteers, go through a verbal check list with students to assess the volunteer:
    - Count for the stretcher
    - Are they performing the stretch correctly?
    - If not, what should they do to stretch correctly?
    - Which muscles/muscle groups is he/she stretching?
  - Ask students what activities/games they can do at home that involve flexibility.

### **Accommodations/Differentiation**

1. This activity can be done without using cards by designating a particular stretch to be performed. Assign each tagger a specific stretch and when students are tagged they must perform that stretch.
2. A picture of the stretch can be printed on the flexibility cards

## **Unit Title: Fitness Components**

### **Lesson 6: Body Composition**

#### **Grade Cluster: 9-12**

#### **References:**

**Vocabulary/ Keywords:** healthy diet, Food Pyramid, food groups

#### **Delaware State Standards Addressed**

#4- Achieves and maintains a health-enhancing level of physical fitness.

#6- Creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction through physical activity.

#### **Big Idea: Fit for Life**

#### **Enduring Understanding(s)**

- Physical Fitness contributes to quality of life.
- Physical activity provides a variety of opportunities for health, enjoyment, challenge, self-expression and or social interaction.

#### **Essential Questions(s)**

- What personal meaning do I find through participation in physical activity?
- How can I include physical fitness into my life?

#### **Unit Transfer Task: Birthday Wish list**

#### **Materials/Equipment:**

Food Pyramid Poster

Pictures of food

empty food boxes

Food Pyramid game with cards (create a Food Pyramid with picture cards that can be taped onto the pyramid, or create pockets on the pyramid)

**Lesson Goals:** identify food groups, know healthy foods and unhealthy foods, place foods in correct food groups

<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Recall the food groups</li> <li>• Place foods in the correct food groups</li> <li>• <b>Differentiate between "go" foods and "stop" foods</b></li> <li>• Identify new foods they are unfamiliar with</li> </ul>	<p>Students will know:</p> <ul style="list-style-type: none"> <li>• Healthy diet and exercise increases healthy body composition</li> <li>• Making healthy food choices effects our body composition</li> </ul>
--	---

**Assessment Plan:**

- Teacher observation of matching foods with correct groups
- Student performance of movements
- Teacher observation of healthy food choices
- Exit card- see attachment F

**Lesson Sequence:**

- Introduction
  - **Move and Freeze Warm-up-** students will perform a locomotor activity, on the signal they will freeze and perform a non-locomotor activity.
  - Discuss with students the last fitness component of Body Composition. Explain that BC is how much fat and muscle we have in our body. Discuss with students the two factors that affect our body composition: diet and exercise. Since we have learned about different ways of exercising with the other fitness components, we will discuss diet and the food pyramid. Show the Food Pyramid and discuss each group, giving examples of foods from each. Explain why some groups are smaller than others, and how much of each we should have in a healthy diet.
- Content
  - **Food Pyramid Match-Up-** Give each student a card with a picture of food. Students are to look at the food and decide which food group it belongs in. Each food group is called individually and students will bring their cards accordingly. After pictures have all been placed correctly, discuss the foods on the pyramid.
  - **Food Group Cones-** Students will walk around the perimeter of the gym, and collect ONE picture when they pass the teacher. On the signal students will move quickly to correct cone that represents the food group. Each group will be asked to hold their pictures up, and the name of the food will be called out, confirming that each food belongs in that food group.
  - **Stop and Go Foods:** -Students will walk around the cones while the teacher stands in the middle of the gym. On the signal students will stop, look at the snack food the teacher is holding, and then move accordingly. If the food is a **"go" (healthy) food students will continue moving. If the food is a "stop" (unhealthy) food, students will remain stopped.**

- Closure
  - Discussion about food groups, and which foods are healthy choices. Ask students why it is important to have a healthy diet. Ask students for examples of healthy snack choices
  - Hand out exit card, complete, and collect
    - Circle the "go" foods and put an X through the "stop" foods.

**Accommodations/Differentiation**

1. If students are unsure about the food card they have been given, they may ask a neighbor.
2. Modify *Stop and Go* by doing *Stop, Go, Think Foods*. For this activity discuss foods that are ok sometimes and in moderation. Movements change to stop, walk, run (stop, think, go foods).

Directions: List 5 "go" foods and list 5 on the "stop" foods.

**Unit Title: Fitness Components**

**Lesson 7: Body Composition (2)**

**Grade Cluster: 9-12**

**References:** *Active Start for Healthy Kids* by Stephen J. Virgillo

**Vocabulary/ Keywords:** review vocabulary from previous lesson

**Delaware State Standards Addressed**

#4- Achieves and maintains a health-enhancing level of physical fitness.

#6- Creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction through physical activity.

**Big Idea: Fit for Life**

**Enduring Understanding(s)**

- Physical Fitness contributes to quality of life.
- Physical activity provides a variety of opportunities for health, enjoyment, challenge, self-expression and or social interaction.

**Essential Questions(s)**

- What personal meaning do I find through participation in physical activity?
- How can I include physical fitness into my life?

**Unit Transfer Task: Birthday Wish list**

**Materials/Equipment:**

25 plates with pictures of healthy and unhealthy foods

Several blank Food Pyramids

Pictures of food

Tape

Hula hoops

Blank Food Pyramids

**Lesson Goals:** recall food groups, correctly place foods in the food groups, identify healthy foods

<p>Students will be able to:</p> <ul style="list-style-type: none"><li>• Identify healthy foods</li><li>• Place foods in the correct food group</li></ul>	<p>Students will know:</p> <ul style="list-style-type: none"><li>• Healthy food is not only part of a healthy diet, but contributes to a healthy heart</li></ul>
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### **Assessment Plan:**

- Teacher observation of matching foods with correct groups
- Student performance of movements
- Teacher observation of healthy food choices
- Exit card- see attachment G

### **Lesson Sequence:**

- Introduction
  - ***In, Out and Around-*** students will perform locomotor movements throughout the area without touching the hoops. When they hear two whistles students will jump in and out of the hoops. When they hear three whistle students will jog around an individual hoop.
  - Review body composition concepts and the Food Pyramid. Review with students how exercise helps the heart. Discuss with students that in addition to exercise, a healthy diet benefits the heart. Discuss fat content in food, and how it can affect the heart.
  -
- Content
  - ***Heart-Smart Hustle-***Students will use locomotor skills to travel around the gym. On the signal students will grab a plate closest to them, turn it over, **and look at the picture. If they see an unhealthy food they sit. On the "go"** signal students who are standing each go to one of the seated children and free them with a tap on the shoulder, and continue to move.
  - ***Food Pyramid Relay-*** Divide students into groups and give each student a picture of food. Students have to run a relay race, placing the foods in the correct groups of their Food Pyramid.
- Closure
  - Review the Food Pyramid groups and ask students for examples in each group. Ask students why healthy foods can also benefit the heart.
  - Hand out exit card, complete and collect
    - List three of your favorite heart healthy foods

### **Accommodations/Differentiation**

1. For ***Heart Smart Hustle*** students who pick up an unhealthy food can perform a short exercise rather than sitting down and waiting to be tapped on the shoulder.
2. If small groups are used for relay have students take more than one turn so there are a few foods from each food group.

**Unit Title: Fitness Components**

**Lesson 7: Birthday Wish List**

**Grade Cluster: 9-12**

**References:**

**Vocabulary/ Keywords:** Review with students the following terms: Cardio respiratory endurance, muscular strength, muscular endurance, flexibility, and body composition.

**Delaware State Standards Addressed**

- #4- Achieves and maintains a health-enhancing level of physical fitness.
- #6- Creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction through physical activity.

**Big Idea: Fit for Life**

**Enduring Understanding(s)**

- Physical Fitness contributes to quality of life.
- Physical activity provides a variety of opportunities for health, enjoyment, challenge, self-expression and or social interaction.

**Essential Questions(s)**

- What personal meaning do I find through participation in physical activity?
- How can I include physical fitness into my life?

**Unit Transfer Task: Birthday Wish list**

**Materials/Equipment:**

- Variety of Equipment magazines
- Wish List worksheet
- Scissors
- Glue

**Lesson Goals**

Students will be able to: <ul style="list-style-type: none"><li>• Execute the Unit Transfer Task as described</li></ul>	Students will know: <ul style="list-style-type: none"><li>• What activities/equipment improve each fitness component</li></ul>
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**Assessment Plan:**

- Completion of Wish List worksheet

**Lesson Sequence:**

- Introduction
  - Direct students to the Birthday Wish List Worksheet
  - Discuss with students each fitness component
  - Have students turn to a partner and discuss which activity they enjoyed the most and why. Also, have students identify which fitness component that activity sought to improve.
  - Ask students to share out what they discussed with their partner.
  - Choose one or more examples from the last week to help illustrate the elements of the transfer task.

- Content-*Wish List*

- Have the materials mentioned above available to the students in an area of the gym. Then give the students this scenario:

Your parents(s)/guardian have said that you can have any piece of equipment or game that you want for your birthday. You must choose equipment or games that improve each different area of fitness. You will be given a variety of equipment magazines that you may choose your equipment or game from. You must cut out the equipment or game that you want and then paste the picture under the area of fitness that will be improved by using the piece of equipment or playing the game. You must then identify the body part being used when using the piece of equipment or game.

- Instructions for the teacher- While students are looking through the catalogs, move around the gym to insure that students are clear on their instruction.

See rubric in Stage 2 as reference.

- Closure
  - Select one or more students to share their Wish List. Allow students to explain why they choose each item and why it fits into that particular fitness component.

**Accommodations/Differentiation**

1. Identified special education students can be paired with a typical peer to complete task
2. Have body part pictures available for younger students.
3. Older student can write in the body part, if necessary have a word bank available depending on the level of the student.

## Resources and Teaching Tips

### Resources

- Include a variety of resources (texts, print, media and web links) that best supports the unit.  
PE Central  
*Fitness for Children* by Curt Hinson  
*Active Start for Healthy Kids* by Stephen J. Virgillo

## Design Principles for Unit Development

Please check the design principles below that are embedded within the unit

- International Education** - the ability to appreciate the richness of our own cultural heritage and that of other cultures and to provide cross-cultural communicative competence.
- Universal Design for Learning** - the ability to provide multiple means of representation, expression and engagement to give learners various ways to acquire and demonstrate knowledge.
- 21<sup>st</sup> Century Learning** – the ability of to use skills, resources, & tools to **meet the demands of the global community and tomorrow’s workplace. (1)** Inquire, think critically, and gain knowledge, (2) Draw conclusions make informed decisions, apply knowledge to new situations, and create new knowledge, (3) Share knowledge and participate ethically and productively as members of our democratic society, (4) Pursue personal and aesthetic growth. (AASL,2007)

(Briefly explain how design principle(s) are embedded within the unit design.)

- o Multiple learning strategies are used in this unit. Students have the opportunity to work individually, in partners, and groups. Visual, auditory, and kinesthetic learning are all emphasized.

## Technology Integration

The ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information

## Connections to Other Areas

Suggestions for integrating instruction with other curricular areas, school support services (health services, counseling, nutrition services and school climate) families and communities.

The following areas are integrated in this unit:

- o Math- counting tickets for *Willie Worm*, counting seconds for stretching, plotting points on a chart
- o Nutrition/ Health- dietary information, Food Pyramid

## Glossary

**Bicep curls-** fully extend and flex the elbow

*As explained in the lesson- the amount of fat and muscle you have in your body*

**Body Composition-** the ratio of lean body mass to fat

**Cardiorespiratory Endurance-** the ability of the heart and lungs to supply oxygen to the working muscles for an extended period

**Deltoid Lift-** lift the arm upward laterally using the shoulder muscles

**Flexibility-** the range of motion of a joint

**Food groups-** the way that foods are categorized on the Food Pyramid

**Food Pyramid-** a dietary guideline that categorizes foods into several groups

**Healthy Diet-** eating foods that are good for us

**Heart rate-**how quickly or slowly the heart beats

**Muscular Endurance-** the ability of a muscle to sustain a contraction, or make multiple contractions, over an extended period of time  
*As explained in lesson- being able to do an activity that involves using the muscles for a long time*

**Muscular Strength-** the amount of force a muscle can exert in a single contraction  
*As explained in lesson-to make muscles stronger*

**Overhead Press-** vertical flexion and extension of the arm, as if pushing something to the sky

**Overhead Triceps Extension-** holding arms over the head, flexion and extension of the elbows, moving the arms upward

**Prediction-** foretell what will happen based on experience

**Pulse-** the beating of the heart

**Rowing-** extending the arms forward, and pulling back, as if rowing a boat

**Shoulder shrug-** lifting the shoulders up and letting them down in a slow, controlled motion

## ***Delaware Model Unit Gallery Template: Physical Education***

This unit has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model unit has undergone a rigorous peer review and jurying process to ensure alignment to selected Delaware Content Standards.

**Unit Title: Teambuilding**

**Designed by: Cary S. Wolfgang**  
**District: Stevenson House Detention**

**Grade Cluster: 9–12**  
**Time Frame: 5 Lessons**

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### **Summary of Unit**

Throughout this unit the students will build skills in cooperation, critical thinking, and leadership. They will participate in a variety of cooperative, group teambuilding activities where students will take turns with the different roles in those activities using and developing their social skills with peers.

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## **Charter School Unit Modification**

### **Guiding Questions**

1. Why was this model unit of instruction selected as part of your schools' curricular submission?

This unit is posted on the DDOE web site as an exemplary unit of instruction for PE. It teaches a unit **on walking that can be applied at any point in the student's lives.**

2. What modifications have been made to the model unit of instruction to meet the specific needs of the student population your school serves?

No modifications will need to be made based on the student population.

3. What modifications have been made to the model unit of instruction that reflect the resources (human, time, building, technology etc.) available to your school?

No modifications will need to be made based on the resources available. The high school will have a gym and outdoor space for the teambuilding activities.

4. Describe any other modifications that have been made to the model unit of instruction that will assist in the curricular review for your school.

No other modification will need to be made to the unit.

## Stage 1 – Desired Results

(What students will know, be able to do and understand)

### Delaware Physical Education Standards

- Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities
- Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities
- Participates regularly in physical activity
- Achieves and maintains a health-enhancing level of physical fitness
- Exhibits responsible personal and social behavior that respects self and others in physical activity settings
- Creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction through physical activity

### Big Idea: Fit For Life

#### Unit Enduring Understanding(s)

- There are personal and social behavioral expectations in physical activity settings.

#### Essential Question(s)

- What are personal and social behavioral expectations in physical settings?

#### Knowledge and Skills

##### Students will know ...

- Physical activity performed safely prevents injuries
- Resolving conflict in a physical activity setting leads to a more enjoyable experience
- Leadership skills to complete tasks with a group
- Trust is an integral part of building relationships

##### Students will be able to ...

- Listen to other peoples ideas
- Effectively resolve conflicts during activities
- Demonstrate self-control
- Trust and depend on teammates

## Stage 2 – Assessment Evidence

(Evidence that will be collected to determine whether or not Desired Results are achieved)

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### Suggested Unit Transfer Task(s)

Creating and teaching a challenge

- Class will separate into even groups
- Complete Challenge Worksheet
- Group will decide on name for their challenge
- Choose equipment needed for challenge
- Create rules for challenge
- Present challenge to the other class groups/student check sheet for peer review of challenge
- Teach their challenge to younger PE classes with emphasis on communication, teamwork, decision making, and compromise

### Rubric(s)

For a score of three, students must:

- Be an active participant
- Submit ideas to group
- Praise other team members
- Take a leadership role during the performance of the challenge

For a score of two, students must complete three of the four tasks as listed above.

For a score of zero, student refuses to participate with the group in the challenge.

### Other Evidence

- Journaling of the debriefing questions
- Teacher observations
- Challenge Worksheet
- Student check sheet for presenting

### Student Self-Assessment and Reflection

- Reflection journals

## **Stage 3 – Learning Plan**

(Learning activities need to align with Stage 1 and Stage 2 and show connections to prior learning)

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### **Key Learning Events Needed to Achieve Unit Goals**

#### **Lesson 1 – Communication**

This is an explanation of teambuilding, how to set up groups/teams, and begin the communication process through challenges (full Lesson 1 copy attached).

#### **Lesson 2 – Beginning Challenges**

These are novice challenges for teams/groups that have just started to work together. Review of a group/teams setup (full Lesson 2 copy attached).

#### **Lesson 3 – Intermediate Challenges**

Teams/groups should be moved around to form new ones, a little more difficult and you begin to see how important communication is to the challenges (full Lesson 3 copy attached).

#### **Lesson 4 – Advance Challenges**

Students will be working unassisted in their teams/groups for these challenges (full Lesson 4 copy attached).

#### **Lesson 5 – Unit Task**

Students will begin the unit task and receive feedback from the teacher and other teams/groups on their created challenge before final completion (full Lesson 5 copy attached).

## **Teambuilding Lesson 1: Communication**

Grade Cluster: 9-12

References: *Teambuilding through Physical Challenges* by Glover and Midura

Vocabulary/Keywords: cooperation, praise, decision making, communication, compromise, positive, challenge, leadership, problem solving

### **Delaware State Standards Addressed**

#5 – Exhibits responsible personal and social behavior that respects self and others in physical settings.

### **Big Idea: Fit for Life**

#### **Essential Question:**

- What are personal and social behavioral expectations in physical activity settings?

#### **Enduring Understanding:**

- There are personal and social behavioral expectations in physical activity settings.

### **Unit Task**

Creating and teaching a challenge:

- Class will separate into even groups
- Complete Challenge Worksheet
- Group will decide on name for their challenge
- Choose equipment needed for challenge
- Create rules for challenge
- Present challenge to the other class groups/student check sheet for peer review of challenge
- Teach their challenge to younger PE classes with emphasis on communication, teamwork, decision making, and compromise

**Materials/Equipment:** Carpet squares or painted line

**Lesson Goals:** Explore different types of communication during activity

#### ***Students will be able to ...***

- Use different forms of communication

#### ***Students will know ...***

- Different forms of communication

### **Assessment Plan (other evidence)**

Oral discussion using the following questions:

- What forms of communication are there?
- Is it important to communicate effectively?
- What personal behaviors can the group expect from an individual participant?

Journaling question: Use the debriefing questions at the end of the challenges for this because not all students will want to talk out loud.

## **Lesson Sequence**

### ***Introduction***

Challenges will be presented to the class. The new unit we are beginning is Teambuilding. Divide the class into equal groups and have the different groups decide on a team name. Have each group choose one person in the group to report out after they decide on a group name. This will be the first time students will communicate as a group. When activity is complete debrief all groups by asking these questions.

- How did the group talk to each other?
- Did everyone get to say their opinion?
- Did anyone receive praise for their idea?
- What problems did you find in communicating in your group?

### ***Content***

Explain to students the definition of communication, and the different forms of communication. Question students about how they can communicate better in their groups.

Follow up by giving student group responsibilities: organizer, praiser, encourager, summarizer, and recorder. Explain how these assignments can rotate with each challenge. Now that each group knows the responsibilities and has an understanding of communication, you are going to present the same challenge to each group. Each group will perform the challenge and debrief using questions in the journal. Use the book named in reference section.

### ***Challenge: Alphabet Line Challenge***

**Object** – Students will rearrange themselves by last name in alphabetical order. They start by lining up on the line. Next, explain that they will not use any verbal communication to get themselves in alphabetical order. They can use any other form of communication to accomplish this task.

### ***Closure***

Debrief by asking questions:

- How did you feel not being able to talk with your group?
- What different forms of communication did your group use?
- Which type of communication do you feel was most effective?

### ***Accommodations/Differentiation Ideas and Tips***

You want to debrief after each challenge, or if you have similar challenges, you can wait until after both have been completed.

## **Unit Title: Teambuilding Lesson 2: Communication**

Grade Cluster: 9-12

References: *Teambuilding through Physical Challenges* by Glover and Midura;  
[www.gophersport.com](http://www.gophersport.com)

Vocabulary/Keywords: cooperation, praise, decision making, communication, compromise, positive, challenge, problem solving, leadership

### **Delaware State Standards Addressed**

#5 – Exhibits responsible personal and social behavior that respects self and others in physical settings.

### **Big Idea: Fit for Life**

#### **Essential Question:**

- What are personal and social behavioral expectations in physical activity settings?

#### **Enduring Understanding:**

- There are personal and social behavioral expectations in physical activity settings.

### **Unit Task**

Creating and teaching a challenge:

- Class will separate into even groups
- Complete Challenge Worksheet
- Group will decide on name for their challenge
- Choose equipment needed for challenge
- Create rules for challenge
- Present challenge to the other class groups/student check sheet for peer review of challenge
- Teach their challenge to younger PE classes with emphasis on communication, teamwork, decision making, and compromise

### **Materials/Equipment**

- Skeleton Poly Puzzle
- US Map Poly Puzzle
- Blindfolds

### **Lesson Goals**

Cooperate and communicate without verbal cues and then without visual cues.

#### ***Students will be able to ...***

- Communicate nonverbally
- Communicate without visual cues

#### ***Students will know ...***

- Communication takes place in a variety of ways

**Assessment Plan (other evidence):** Debriefing questions

## **Lesson Sequence**

### ***Introduction***

Challenges will be presented as part of the teambuilding unit. Students will be divided into two groups. Students will communicate as a group to select a recorder, organizer, praiser, encourager, and summarizer. Have students complete both challenges; debriefing after each challenge is completed. You will want to debrief them with the following questions:

- How did the group talk to each other?
- What were the social behavioral expectations in the group?
- Did anyone receive praise for their idea?
- What problems did you find in communicating in your group?

### ***Content***

Student responsibilities for challenges: recorder, organizer, praiser, encourager, and summarizer. Make sure that groups have explained each responsibility and they understand what is expected of them during the challenge. Both challenges are from [www.gophersport.com](http://www.gophersport.com).

**Challenge:** Hospital Emergency Room – Students are to work together to assemble a skeleton puzzle. The activity will be completed two times. The first time, complete the puzzle without any verbal communication, and the second time, half of the group will be blindfolded. During the blindfolded stage, no seeing person can touch the puzzle pieces or those students who are blindfolded.

**Challenge:** U.S. Map – Students are to work together to assemble the map. The activity will be completed two times. The first time, complete it without any verbal communication, and the second time, half of the group will be blindfolded. No seeing person can touch the puzzle pieces or those who are blindfolded. Everyone is allowed to talk and assemble the puzzle.

### ***Closure***

Debrief by asking questions:

- How did you feel not being able to talk with your group?
- What different forms of communication did your group use?
- Which type of communication do you feel was most effective?

### **Accommodations/Differentiation Ideas and Tips:**

Activity challenge may take more than one class period.

## **Unit Title: Teambuilding Lesson 3: Cohesion Fun**

Grade Cluster: 9-12

References: *Back Pocket Adventure* and *Silver Bullets* by Karl Rohnke; Project Adventure, Inc.

Vocabulary/Keywords: cooperation, praise, decision making, communication, compromise, positive, challenge, problem solving, leadership

### **Delaware State Standards Addressed**

#5 – Exhibits responsible personal and social behavior that respects self and others in physical settings.

### **Big Idea: Fit for Life**

#### **Essential Question:**

- What are personal and social behavioral expectations in physical activity settings?

#### **Enduring Understanding**

- There are personal and social behavioral expectations in physical activity settings.

### **Unit Task**

Creating and teaching a challenge:

- Class will separate into even groups
- Complete Challenge Worksheet
- Group will decide on name for their challenge
- Choose equipment needed for challenge
- Create rules for challenge
- Present challenge to the other class groups/student check sheet for peer review of challenge
- Teach their challenge to younger PE classes with emphasis on communication, teamwork, decision making, and compromise

**Materials/Equipment:** Two lengths (sticks, dowel, pencils, etc.) 6 inches long

### **Lesson Goals**

Cooperate and communicate effectively to complete challenges successfully.

#### ***Students will be able to ...***

- Communicate and cooperate with partners and group members

#### ***Students will know ...***

- To be successful they have to cooperate and communicate

### **Assessment Plan (other evidence)**

Teacher observation of completed challenges.

## **Lesson Sequence**

### **Introduction**

Explain to students that they will engage in large group activities. All activities will be teacher led.

### **Content**

Make sure that students have heard and understood directions before beginning the challenges.

**Texas Big Foot** - Ask students to form a circle, and place their arms around the shoulders of the person next to them until everyone in the circle does it. Announce that this activity is extremely difficult to accomplish and the morphological cooperation is essential to success and avoidance of injury. To complete the challenge, the group has to take three giant steps toward the center of the circle. To be successful, the final step must end with the group still intact and standing.

**Phizz, Splot, Grooby** - Students are to count from 1 to 20. Have each student take a number. If it is a small group, you may need students to say more than one. The second time through, students are to replace the #3 and #13 with the word phizz, #6 and #16 with the word splot, and the #9 and #19 with the word Grooby. Ready set go! Did I hear two Groobies? Start over again, until it is done correctly.

**Passing Crossed or Uncrossed** – Students are in circle formation for this activity. To begin, the leader passes the pencils while saying, “I pass these pencils to you crossed or uncrossed.” The leader indicates to the group that each person is to individually receive the pencils and then pass them on crossed or uncrossed, also verbally stating both how they were received and how they are being passed. The key is the leg position of the person doing the passing and the leg position of that person to whom they are being passed. It is up to the group to figure out and continue passing until the leader receives the pencils back.

### **Closure**

Debrief by asking questions:

- How did you feel about the large group activities?
- What forms of communication did you recognize?
- How did the three large group activities differ?
- What did you learn about yourself during the large group activities?

### **Accommodations/Differentiation Ideas and Tips:**

Activity challenge may take more than one class period.

**Unit Title: Teambuilding**  
**Lesson 4: Advance Challenges**

Grade Cluster: 9-12

References: GOPHER, [www.gophersport.com](http://www.gophersport.com)

Vocabulary/Keywords: cooperation, praise, decision making, communication, compromise, positive, leadership, problem solving, challenge

**Delaware State Standards Addressed**

#5 – Exhibits responsible personal and social behavior that respects self and others in physical settings.

**Big Idea: Fit for Life**

**Essential Question**

- What are personal and social behavioral expectations in physical activity settings?

**Enduring Understanding**

- There are personal and social behavioral expectations in physical activity settings.

**Unit Task**

Creating and teaching a challenge:

- Class will separate into even groups
- Complete Challenge Worksheet
- Group will decide on name for their challenge
- Choose equipment needed for challenge
- Create rules for challenge
- Present challenge to the other class groups/student check sheet for peer review of challenge
- Teach their challenge to younger PE classes with emphasis on communication, teamwork, decision making, and compromise

**Materials/Equipment**

- Four, 44-inch long wood planks with notches that are 7-inches in diameter
- Rubber ball
- Six playground balls (8-inch diameter), six poly spot markers, and six nylon jump ropes 9-feet long

**Lesson Goals**

Cooperate and communicate effectively to complete challenges successfully.

***Students will be able to ...***

- Communicate and cooperate with partners and group members

***Students will know ...***

- To be successful they have to cooperate and communicate

## **Assessment Plan (other evidence)**

Teacher observation of completed challenges.

## **Lesson Sequence**

### ***Introduction***

Explain to students that they will engage in large group activities. Activity will be explained by teacher and then students will need to work as a group or team to complete the challenges.

### ***Content***

Make sure that students have heard and understood directions before beginning the challenges.

***Pulling for Each Other*** - The object is to successfully pass 6 balls around a circle while connected to other teammates. Arrange the 6 poly spots in a circle. Have each teammate stand on a spot marker. Each teammate should tie one end of a jump rope around one wrist and connect the opposite end to a student across the circle. They should not connect to a teammate directly next to them, nor should they connect both wrists to the same teammate. Make the circle large enough to allow a few inches of slack in the ropes once connected. The team must pass all 6 balls around the circle without moving off the spots. Each ball follows the same path of catching and throwing to teammates. Figure out how to make good throws without yanking the wrists of the teammates they are connected to. If a teammate is off the spot, rope touches the floor, or ball touches the floor then the team must begin challenge again.

***Solution*** – When all 6 balls have completed the path around the circle, the challenge is complete.

***Suspended Ball Challenge*** – The object is to suspend the ball in the middle of the four posts without stick ends touching the floor. Start by placing the four posts farther apart than the length of the sticks. Using the four sticks, find a way to secure the ball in the air without anything touching the floor. The four corner posts cannot be moved.

***Solution*** – Weave the sticks over and under each other and lock them into the grooves. Then place them on the posts. The ball will sit in the center square.

### ***Closure***

Debrief by asking questions:

- How did you feel about the group doing the activity by themselves?
- What forms of communication did you recognize?
- What did you observe, notice, or hear during the group?
- What did you learn about yourself during the large group activities?

### **Accommodations/Differentiation Ideas and Tips**

- Activity challenge may take more than one class period.
- In "Pulling for Each Other," you can vary the size and variety of throwing objects.

## **Unit Title: Teambuilding Lesson 5: Unit Task**

Grade Cluster: 9-12

References: [www.gophersport.com](http://www.gophersport.com), *Teambuilding Challenges* by Glover & Midura

Vocabulary/Keywords: cooperation, praise, decision making, communication, compromise, positive, leadership, problem solving, challenge

### **Delaware State Standards Addressed**

#5 – Exhibits responsible personal and social behavior that respects self and others in physical settings.

### **Big Idea: Fit for Life**

#### **Essential Question**

- What are personal and social behavioral expectations in physical activity settings?

#### **Enduring Understanding**

- There are personal and social behavioral expectations in physical activity settings.

### **Unit Task**

Creating and teaching a challenge

- Class will separate into even groups
- Complete Challenge Worksheet
- Group will decide on name for their challenge
- Choose equipment needed for challenge
- Create rules for challenge
- Present challenge to the other class groups/student check sheet for peer review of challenge
- Teach their challenge to younger PE classes with emphasis on communication, teamwork, decision making, and compromise

**Materials/Equipment:** All available from teacher's storage area

### **Lesson Goals**

Groups will create the teambuilding challenge that they will teach to younger students.

#### **Students will be able to ...**

- Communicate and cooperate with group members on completing unit task

#### **Students will know ...**

- To be successful they have to cooperate and communicate as a group to complete unit task

### **Assessment Plan (other evidence)**

- Teacher observation
- Student check sheet
- Challenge Worksheet

## **Lesson Sequence**

### ***Introduction***

Explain to students that they will complete the Challenge Worksheet as a group for the unit task. Task will be explained by the teacher, and then students will need to work as a group to complete the challenges they will present to younger students. When groups are ready, they will present to the other students for review. They will use the student check sheet.

### ***Content***

Challenge Worksheet and group task. Students will be separated into groups and given the Challenge Worksheet to complete for the task. The teacher will explain how the Challenge Worksheet is to be completed.

### ***Closure***

Debrief by asking questions:

- How did you feel about the challenge your team/group created?
- Did your team/group have any communication breakdowns? If so, what were they?
- What did you observe, notice, or hear during the creation of your challenge?
- What did you learn about yourself doing this unit task?

### **Accommodations/Differentiation Ideas and Tips**

Unit task will take more than one class period to complete, and it is suggested that no debriefing occur until the group presents their challenges to their peers.

# Challenge Worksheet

## Teambuilding Unit Task

Names \_\_\_\_\_  
Team/Group \_\_\_\_\_

Challenge Name \_\_\_\_\_

### Materials for Challenge

\_\_\_\_\_  
\_\_\_\_\_

In this section, you will describe the challenge and how it begins (keep in mind will it be group guided, so put here what you want the children to do.), how the equipment is to be used, what the teacher should look for from the presenting group, and the solution. Also, if there are any rules (example: if anyone steps off the board, they must begin again) and criteria that need to be followed for a successful challenge.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Debriefing the challenge:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Assessing the challenge (suggestions):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Group/Team you presented this challenge to: \_\_\_\_\_

## Student Presentation Check Sheet

Student Reviewer \_\_\_\_\_

Date \_\_\_\_\_

Directions: When a group presents to you, complete this check sheet by answering the questions by circling, 4= Excellent, 3= Good, 2= Fair, and 1= Poor. Then add up the numbers for a score.

1. Did they have a name for their challenge?	1	2	3	4
2. Are the rules for the challenge clear, so someone can complete the challenge?	1	2	3	4
3. Did the student group members allow you to ask questions?	1	2	3	4
4. Did they provide all materials for completing the challenge?	1	2	3	4
5. Was a debriefing done after the challenge?	1	2	3	4

SCORE: \_\_\_\_\_

### ***Suggestions for group presenting:***

## Resources and Teaching Tips

### Resources

- Include a variety of resources (texts, print, media, and web links) that best supports the unit.
- *Teambuilding through Physical Challenges*, Glover & Midura, Human Kinetics Pub
- *More Teambuilding Challenges*, Glover & Midura, Human Kinetics Pub
- Project Adventure texts:
  - *Silver Bullets*, Karl Rohnke, ISBN 0-934387-01-X
  - *Cowstails and Cobras II*, Karl Rohnke, ISBN 0-934387-08-7
- *No Props – Great Games with No Equipment*, Mark Collard, ISBN 0-934387-05-02
- *Back Pocket Adventure*, Karl Rohnke and Jim Grout, ISBN 0-934387-11-7
- www.pa.org
- Teambuilding products found at [www.GOPHER.com](http://www.GOPHER.com)

### Teaching Tips

- Make sure that you have all equipment or initiatives set up ahead of time.
- Prepare more than one activity as groups will progress at varied timeframes.
- Debriefing can be done after one or even two challenges.
- Daily lessons may take more than one class period to complete depending on group.

### Accommodations/Differentiation

- Groups have to solve the challenges on their own, and any accommodations should be implemented by the group doing the challenge.
- Vary the level of materials for groups that need modifications.

## Design Principles for Unit Development

Please check the design principles below that are embedded within the unit

- **Universal Design for Learning** – the ability to provide multiple means of representation, expression, and engagement to give learners various ways to acquire and demonstrate knowledge.

(Briefly explain how design principle(s) are embedded within the unit design)

- Various types of engagement activities

## Connections to Other Areas

**Suggestions for integrating instruction with other curricular areas, school support services (health services, counseling, nutrition services and school climate) families and communities.**

This unit is connected to family, counseling, and community by developing problem-solving and conflict-resolution skills that will enable students to create positive school and community environments.

## ***Delaware Model Unit: Health Education***

This unit has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model unit has undergone a rigorous peer review and jurying process to ensure alignment to selected Delaware Content Standards.

**Unit Title:** Healthy Relationships

**Designed by:** Libby Thomas, School Health Consulting  
Jennifer Sellitto-Penoza, Child, Inc.

**Agency:** Delaware Coalition Against Domestic Violence

**Grade Cluster:** 9–12

**Time Frame (Number of Lessons):** Five Lessons

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### **Summary of Unit**

This unit is designed for primary prevention against interpersonal violence. The unit advocates gender respect, effective communication, and advocacy. Media influence on cultural values and social norms is explored. Students will be encouraged to define knowledge, attitudes, beliefs, and behaviors that support and promote healthy relationships, and to practice setting boundaries that show respect for themselves and others. Finally, students will experience the role of the courageous bystander who attempts to advocate for a respectful environment where healthy relationships are the norm.

This unit is based on the DELTA Developing Healthy Relationships Curriculum (DHRC) of the Delaware Coalition Against Domestic Violence with consultation by Noel Duckworth.

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## **Charter School Unit Modification**

### **Guiding Questions**

1. Why was this model unit of **instruction selected as part of your schools' curricular submission?**

This unit is posted on the DDOE web site as an exemplary unit of instruction for health. It teaches fundamental information and strategies for eating and staying healthy.

2. What modifications have been made to the model unit of instruction to meet the specific needs of the student population your school serves?

No modifications will need to be made based on the student population.

3. What modifications have been made to the model unit of instruction that reflect the resources (human, time, building, technology etc.) available to your school?

No modifications will need to be made based on the resources available. The high school will have classroom and, if needed, a gym or multi-purpose room available for healthy activities.

4. Describe any other modifications that have been made to the model unit of instruction that will assist in the curricular review for your school.

No other modification will need to be made to the unit.

## Stage 1 – Desired Results (What students will know, do, and understand)

### Delaware Content Standards

- Include those addressed in Stage 3 and assessed in Stage 2.
- 1. Students will understand essential health concepts in order to transfer knowledge into actions for life. Specify core concepts to be addressed: Injury Prevention and Safety, Personal Health and Wellness, Mental Health, and Family Life and Sexuality
- 2. Students will analyze the influence of family, peers, culture media, technology and other factors on health behavior.\*
- 3. Students will demonstrate the ability to access information, products and services to enhance health.\*
- 4. Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
- 5. Students will demonstrate the ability to use decision-making skills to enhance health.
- 6. Students will demonstrate the ability to use goal-setting skills to enhance health.
- 7. Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
- 8. Students will demonstrate the ability to advocate for personal, family and community health.

### Big Idea

- Health is Personal Power

### Unit Enduring Understanding(s)

- Full-sentence, important statements or generalizations that specify what students should understand from the Big Ideas (s) and/or Content Standards and that are transferable to new situations.
- Decisions and choices that we make about our behaviors directly influence our health and the health of others.
- If we understand that respect for ourselves and others is a personal responsibility, we can learn to make better decisions and choices.
- We must choose not to support abusive or disrespectful behaviors.

### Essential Questions

- What is Health?
- What prevents people from practicing healthy behavior?

### Unit Essential Question(s)

- Open-ended questions designed to guide student inquiry and learning.
- How do I recognize and practice healthy relationships?
- How do my decisions and choices influence my relationships and those of others?

### Knowledge and Skills

#### Students will know...

- Respectful vs. disrespectful behaviors
- Gender stereotypes lead to discrimination
- Communication styles and types

- Behaviors based on power and based on equality
- The benefits of setting limits
- The influences of media and peer pressure on relationships
- The qualities of healthy relationships
- Clear and unclear boundaries
- Sex vs. gender
- Respect for self and others
- The relationship between disrespect and violence
- The definition of a courageous bystander
- Everyone can make a difference

**Students will be able to...**

- Demonstrate effective message tactics and strategies
- Recognize how gender stereotypes are limiting and/or disrespectful
- Set and respect boundaries of self and others
- Choose how they will be treated and how they will treat others
- Critically analyze media messages
- Recognize a cycle of abuse
- Identify resources to help with abusive relationships
- Practice how to communicate and set boundaries for a healthy relationship
- Resist and challenge unhealthy cultural norms

**Stage 2 – Assessment Evidence**  
 (Evidence that will be collected to determine whether or not Desired Results are achieved)

**Suggested Performance/Transfer Task(s)**

You are the sophomore class president in a high school where abusive behavior has been tolerated or ignored. You know it is time to become a courageous bystander! Knowing that you will want support, you ask your fellow officers and the presidents of the other classes if they will join with you in your prevention work. Together, you decide to begin a marketing campaign that will grab the attention of all the students. You are the creator and implementer of the plan. You will identify several strategies that may be part of the solution to the blatant disrespect you see every day at school.

Suggestions for your marketing campaign might be a public service announcement for the local TV or radio station, a video for the school website, a PowerPoint presentation with voice over for the student council, bumper stickers for student and teacher vehicles, an open letter to the school board or the PTA, a petition for students to sign, a role-play for the next assembly, and a poster campaign. You are not limited to these choices. You are invited to be creative and to choose the medium for your advocacy and communication skills to be showcased and your understanding of the issues to be obvious.

There will be a gallery walk for presentations to be shared with classmates. Then the teacher is encouraged to submit the presentations to [www.safeandrespectful.org](http://www.safeandrespectful.org) (see connections to other areas).

**Rubric(s)**

Points	
4	The student work shows excellent advocacy and communication skills, identifies the audience, and uses original and creative style to demonstrate understanding of at least one of the following topics: promoting respect and equality, gender stereotyping, media message deconstruction, or interpersonal abuse versus equality in a relationship.
3	The student work shows average advocacy or communication skills, identifies the audience, and uses original and creative style to demonstrate understanding of at least one of the following topics: promoting respect and equality, gender stereotyping, media message deconstruction, or interpersonal abuse versus equality in a relationship.
2	The student work shows minimal advocacy or communication skills, has an unclear target audience, and/or little original and creative style to demonstrate understanding of at least one of the following topics: promoting respect and equality, gender stereotyping, media message deconstruction, or interpersonal abuse versus equality in a relationship.
1	The student work has few indications of skill in advocacy or communication, an unclear target audience, and little creativity in demonstrating understanding of one of the following: promoting respect and equality, gender stereotyping, media message deconstruction, or interpersonal abuse versus equality in a relationship.

**Other Evidence**

Lesson Two: Five-paragraph essay deconstructing a media message.

Lesson Three: Compare/contrast statement on abuse vs. equal power in a relationship.

### **Student Self-Assessment and Reflection**

Lesson One: Reflection on how communication style can affect a given situation.

Lesson Four: Reflection about a hurtful/disrespectful comment and the feelings evoked.

## **Stage 3 – Learning Plan** (Design learning activities to align with Stage 1 and Stage 2 expectations)

### **Key Learning Events Needed to Achieve Unit Goals**

Lesson plans may be attached to Stage 3 and must include relevant citations and follow U.S. copyright laws.  
<http://www.umuc.edu/library/copy.shtml>

- Scaffold in order to acquire information, construct meaning, and practice transfer of understanding.
- Provide ongoing opportunities for self-monitoring and self-evaluation.

[KUDs](#) (Know, Understand, and Do)

[SLM](#) (Student Learning Map)

[Word Wall](#)

[Lesson One:](#) Communication and Boundaries

- Communication (Style) Situations
- Practice Setting Boundaries

[Lesson Two:](#) Gender Stereotyping and Media

- Worksheet, Examining Media Messages

[Lesson Three:](#) Interpersonal Abuse Vs Equality

- How to Help a Friend Scenarios

[Lesson Four:](#) Respect

- Continuum of Harm Statements

[Lesson Five:](#) Courageous Bystander

- Courageous Bystander Scenarios
- Organizer, How can I be part of the solution?

Transfer Task and Rubric

Instructions and PowerPoint for optional review game



Intructions\_Answers  
.doc



Optional Unit Review  
Game.ppt

## **Resources and Teaching Tips**

### **Resources**

- Includes a variety of resources (texts, print, media, and web links) that best support the unit.

- DELTA Developing Healthy Relationships Curriculum (DHRC) used by Child, Inc. and Delaware Council for Justice
- [www.Safeandrespectful.org](http://www.Safeandrespectful.org) – Delaware website useful for students, parents, and teachers
- [www.medialit.org](http://www.medialit.org) – Center for Media Literacy
- [www.nmmlp.org](http://www.nmmlp.org) – New Mexico Literacy Project
- [www.dcadv.org](http://www.dcadv.org) – website of the Delaware Center against Domestic Violence
- [www.childinc.org](http://www.childinc.org) – a nonprofit agency in Delaware that provides services for those experiencing abuse in their relationships
- [www.cdc.gov/healthmarketing/pdf/AudienceInsights\\_teens.pdf](http://www.cdc.gov/healthmarketing/pdf/AudienceInsights_teens.pdf)
- [www.cdc.gov/healthyyouth/](http://www.cdc.gov/healthyyouth/) – for the Health Education Curriculum Analysis Tool (HECAT)
- [www.thesafespace.org/featured-content/students-psa/](http://www.thesafespace.org/featured-content/students-psa/) – for PSA about dating violence
- <http://teenhealth.about.com/od/relationships/a/cycleofabuse.htm> – for cycle of abuse information
- *The Teen Relationships Workbook*, Wellness Reproductions and Publishing, Inc., 2001 for worksheet adaptations

### Teaching Tips

- Provide tips to help teachers identify and correct student misunderstandings and weaknesses.

This unit can be highly charged emotionally for some students who may be embroiled in a “cycle-of-abuse” relationship. If students become upset, referral to the school nurse, wellness center, or school counselor may be needed. In addition, some students may resist the challenge of their values and beliefs by these materials.

### Accommodations/Differentiation

- Describe how instruction may be varied to address differences in readiness, interest, and/or learning styles.
- Elbow partners
- Small-group activity
- Class discussion of all concepts
- Teacher reinforcement is done by using graphic organizers, board work, writing, technology, and guided practice

## Design Principles for Unit Development

At least one of the design principles below is embedded within unit design

- International Education** – the ability to appreciate the richness of our own cultural heritage and that of other cultures and to provide cross-cultural communicative competence.
- Universal Design for Learning** – the ability to provide multiple means of representation, expression and engagement to give learners various ways to acquire and demonstrate knowledge.
- 21<sup>st</sup> Century Learning** – the ability of to use skills, resources, and tools to meet the demands of the global community and tomorrow’s workplace. (1) Inquire, think critically, and gain knowledge, (2) Draw conclusions make informed decisions, apply knowledge to new situations, and create new knowledge, (3) Share knowledge and participate ethically and productively as members of our democratic society, (4) Pursue personal and aesthetic growth. (AASL, 2007)

(Briefly explain how design principle(s) are embedded within the unit design.)

Students are engaged in their learning by use of the media, scenarios for practice, and written expression of their reflections and acquisition of content. They are asked to think critically about relationships, gender stereotyping, and boundary setting for healthy relationships and draw their own conclusions. Finally, students will formulate a plan to advocate as a safe and courageous bystander.

### **Connections to Other Areas**

Suggestions for integrating instruction with other curricular areas, school support services (health services, counseling, nutrition services, and school climate), families, and communities.

Interpersonal violence is universal and can affect all areas of society. It occurs in all socioeconomic groups, in all ethnic and religious groups, and in all races. Awareness can help those affected seek education, protection, and treatment if necessary. Families and communities can help people get the support they need. Referral to school support services (nurse, wellness center, or counselor) can facilitate the support needed for those in an abusive relationship or those who have difficulty understanding the concepts.

### **Special Opportunity for Students and Teachers to Share Their Best Work**

The teacher is encouraged to use a process (i.e., teacher selected, student-peer selected, etc.) to choose the best three transfer task projects from each class for submission to the Prevention Subcommittee of the Delaware Domestic Violence and Victims' Rights Task Force at <http://www.safeandrespectful.org/>. Winning entries will be posted on the website and the authors will be entered in a raffle for a grand prize.

Note to teacher: Fall semester entries are due by February 1 and spring semester entries are due by May 15 of each calendar year. Please send throughout the school year at the completion of each Healthy Relationships Unit. Send an email to [safeandrespectful@gmail.com](mailto:safeandrespectful@gmail.com) with the top three projects from each class attached. If the project cannot be attached, please email a request for instructions. Please ask students for contact information so that winners can be notified even if the semester has ended. Winners will be notified by the teacher who will be notified by <http://www.safeandrespectful.org/>. Please include the teacher's address, email, and phone number for questions about the projects and notification of the winners.

Thank you for choosing to implement the Healthy Relationships Curriculum. Delaware's Domestic Violence Task Force and Victims Rights Task Force's Prevention subcommittee worked with the Department of Education to create a curriculum that meets Delaware Health Standards and to provide students the knowledge, skills and behaviors that support healthy relationships. As part of this project, we are continually looking for ways to improve the curriculum. By giving your students the pre/post tests and sending them to the address below, you can be a vital part of the evaluation and subsequent growth of this unit. Below are the procedures for the pre surveys, post surveys, and information survey form, which you will find in this curriculum. If you have any questions about our procedures as listed below, you can contact the DELTA Coordinator at [safeandrespectful@gmail.com](mailto:safeandrespectful@gmail.com). You can also visit [www.safeandrespectful.org](http://www.safeandrespectful.org) for more information about the Healthy Relationships program in Delaware.

### **PRE SURVEYS**

- Pre Surveys should be administered to students at the beginning of the first class period at the start of the Healthy Relationships unit (before Lesson 1 is taught).
- Instruct students to complete their anonymous survey IDs so that pre and post survey data may be matched without knowing a student's identity.
- Completed pre surveys should be collected from students and maintained by the unit instructor until all five lessons are taught.

### **POST SURVEYS**

- Post surveys should be administered to students at the end of the class period during which the final lesson of the Healthy Relationships unit was taught.
- Instruct students to complete their same anonymous survey IDs so that pre and post survey data may be matched without knowing a student's identity.
- Completed post surveys should be collected from students and combined with the pre surveys completed and collected at the start of the unit.

### **SURVEY INFORMATION FORM**

- A survey information form should be completed for each cohort (class, period, etc.) of students who receive the full Healthy Relationships unit.
- Complete all information on the form as this will be used to identify each distinct cohort of students and their related pre/post survey information.

Please send all completed Healthy Relationship unit evaluation packets (consisting of a survey information form, student pre surveys, and student post surveys) for each of your class periods who receive the unit of instruction to:

**DELTA COORDINATOR**  
**Child, Inc.**  
**507 Philadelphia Pike**  
**Wilmington, DE 19809**

Questions and concerns can be e-mailed at any time to: [safeandrespectful@gmail.com](mailto:safeandrespectful@gmail.com)

## **HEALTHY RELATIONSHIPS ~ Pre Survey**



TO HELP US MATCH TO YOUR SURVEYS WITHOUT KNOWING WHO YOU ARE, PLEASE USE YOUR SURVEY ID.  
 Please write the month and the date you were born (don't put the year). Then write the first 3 letters of your mother's first name.

EXAMPLE: If you were born on July 5<sup>th</sup> and your mother's name is Mary, your ID would be:

PLEASE WRITE YOUR ID HERE

J	U	L	0	5	M	A	R
---	---	---	---	---	---	---	---

--	--	--	--	--	--	--	--

Thank you for taking the time to complete this short survey. We are interested in what you think when it comes to healthy relationships. Please be sure to answer all of the questions in all sections. Your answers will be kept confidential. When you finish, please return the survey to your teacher.

Would you consider the following behaviors respectful?	Definitely Not Respectful	Not Respectful	Neutral	Respectful	Definitely Respectful
1. Picking on someone as long as they are not physically hurt.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Your boyfriend/girlfriend threatens to do something hurtful if you broke up with him/her.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Calling your boyfriend/girlfriend names during an argument.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Your boyfriend/girlfriend wants you to spend all of your time with him/her.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Your boyfriend/girlfriend values your opinion even when you disagree.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Telling a guy that he's "acting like a girl" to put him down.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Your boyfriend/girlfriend shares embarrassing or private photos/videos of you.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Asking your friends to watch your boyfriend/girlfriend if you don't trust him/her.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Your boyfriend/girlfriend pressures you to do something you don't want to do.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Rating a girl's looks on a scale of 1-10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Your boyfriend/girlfriend always checks on your whereabouts and activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MOST of the time, what do you think about these statements?	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
12. Both partners should have equal say in their relationship.	<input type="checkbox"/>				
13. Standing up for what I believe is important to me even if others don't agree.	<input type="checkbox"/>				
14. Television shows, movies, and song lyrics can have an effect on how you think or act.	<input type="checkbox"/>				
15. People who act aggressively deserve respect.	<input type="checkbox"/>				
16. It is better if girls do typical "girly" stuff and guys do typical "manly" stuff.	<input type="checkbox"/>				

Continue to the next page



<b><u>MOST</u> of the time, what do you think about these statements?</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
17. As long as I don't act violently in a relationship, I am promoting safe and respectful relationships.	<input type="checkbox"/>				
18. If safe to do so, people should stand up for someone being insulted.	<input type="checkbox"/>				
19. There are things I can do to help prevent violence in my community/society.	<input type="checkbox"/>				
20. Advertising is mainly used for brand or product recognition and does not contain deeper meaning or messages.	<input type="checkbox"/>				
21. My choice of communication style can have an effect on how I make others feel.	<input type="checkbox"/>				
22. Personal boundaries can only be violated by strangers or acquaintances so it isn't necessary to have clear boundaries with good friends or my boyfriend/girlfriend.	<input type="checkbox"/>				

<b>Please answer a few questions about yourself:</b>				
What is your gender?	<input type="checkbox"/> Male	<input type="checkbox"/> Female		
How old are you TODAY?	_____ years			
What is your current grade?	<input type="checkbox"/> 9th	<input type="checkbox"/> 10th	<input type="checkbox"/> 11th	<input type="checkbox"/> 12th

**THANK YOU!!**

## *Health Education Lesson Plan – Lesson One*

**Title: Communication and Boundaries**

**Big Idea: Health is Personal Power**

### 9-12 Unit Cluster Enduring Understandings

- Health is important and personal actions will impact self and others in many ways.
- Internal and external factors influence personal and community health
- Choosing health resources require critical evaluation and analysis
- Refusal, negotiation, and collaboration skills will enhance the health of self and others
- There are barriers that can hinder healthy decision-making
- Several factors influence the formation, achievement and evaluation of a long-term personal health plan
- People have the power to create change

### Lesson Essential Question(s)

- How do we communicate effectively with each other?
- How does a feeling of self-worth help us set and maintain our boundaries?

### Delaware Health Education Standards

#### Health Concepts

- Tobacco, Alcohol & Drugs**
- Injury Prevention & Safety**
- Nutrition & Physical Activity**
- Family Life & Sexuality**
- Personal Health & Wellness**
- Mental Health**
- Community & Environmental Health**

#### Skills

- INF**
- AI**
- IC**
- DM**
- GS**
- SM**
- AV**

### Lesson Summary

Students will examine styles and effectiveness of their interpersonal communication and will define and practice setting boundaries.

Students will know...	Students will be able to...
<ul style="list-style-type: none"> <li>• Styles of communicating</li> <li>• Types of communication</li> <li>• Clear and unclear boundaries</li> <li>• Some people unintentionally or unintentionally cross our boundaries</li> <li>• Communication styles help us set and maintain our boundaries</li> </ul>	<ul style="list-style-type: none"> <li>• Identify which style communicates respect for self and others</li> <li>• Make a connection between self-worth and boundaries</li> <li>• Practice setting of boundaries</li> </ul>

## Time

One class period.

## Materials and Preparation

- Worksheet [Communication \(Styles\) Situations](#) to be copied for each student
- [Practice Boundary Setting](#) to be copied for each student
- Whiteboard or newsprint
- TV/projector to play PSAs
- Computers or hard copies of quiz: Building Blocks to Healthy Relationships

## Resources and Web Links

- [www.safeandrespectful.org/media/psa.html](http://www.safeandrespectful.org/media/psa.html)
- *The Teen Relationships Workbook* (2001). Wellness Productions and Publishing.

## Teaching Steps

1. Hand out Pre Survey to students and have them fill out.
  - Make sure students fill in a ID Code they will remember (such as month/date of their birthday and first three letters of parents name).
  - Collect them, and save them to send in with the Post Tests at the end of the unit.
  - The Pre surveys are located at the end of this lesson, along with our procedures. Please follow procedures carefully.
2. Introduce unit of instruction with "Building Blocks to Healthy Relationships: Check Yourself!" Self-assessment.
  - Using a Smartboard, individual computers, or hard copies, have students take a quiz called "Building Blocks to Healthy Relationships" found on [www.safeandrespectful.org](http://www.safeandrespectful.org) under "check yourself."
  - Quiz scores are personal and do not need to be shared.
  - Review the quiz with the students and tell them the concepts found throughout the quiz will be the focus of this unit titled, "Healthy Relationships."
  - Ask if anyone has ever felt uncomfortable by the way someone talked to/about them and how they felt about it.
  - Allow a story or two to be shared.
3. Watch the one minute PSA, "Just Spray It"  
<http://www.safeandrespectful.org/media/psa.html>.
  - Identify/discuss different communication styles used in the story.
  - Have students brainstorm the four communication styles: aggressive, passive, passive-aggressive, and assertive (see teacher tips at end of lesson) with teacher guidance.
  - List the four types on a whiteboard or poster board for reference.
  - Students, in small groups, will discuss the communication (styles) situations (scenarios on attached worksheet).
  - Process advantages and disadvantages of each style: Possible discussion questions.
  - Which style is most effective and why?
    - ♦ What are the advantages and disadvantages of each style?
    - ♦ Could you use one style one time and another later?
    - ♦ How has your own style worked for you or not worked?

- ♦ How could you more effectively relate to others?
4. Remind students of the four styles of communication and ask if they are aware of their personal style of communicating and whether their style makes people feel threatened.
  5. Assign students a reflection piece on how they could have handled a situation differently using a style of communication different from their favored style (aggressive, passive, passive-aggressive, and assertive). As a reflection piece, it will be given points for completion only.
  6. Ask students to discuss the definition of "boundary" with an elbow partner and to consider how the word "boundary" fits in with communication styles.
  7. Teacher-led discussion about boundaries (definition of boundary on word wall).
    - Students will fold a sheet of paper lengthwise to make two columns.
    - One column will be labeled Physical Boundaries and the other Mental/Emotional Boundaries.
    - With an elbow partner, students will generate two lists.
    - Teacher will ask for a volunteer recorder who will write the lists on the board as the pairs offer contributions, clockwise around the classroom.
    - Teacher will review the list with the class and facilitate discussion as needed (see teacher notes for examples).
  8. Handout worksheet, [Practicing Boundary Setting](#).
    - Students will complete the worksheet individually and discuss with their elbow partner.
    - Tell students that they will be sharing their information and that there is a personal section on the bottom that they are not required to complete during class.
    - Ask them to finish the last section at home if they choose not to complete it in class.

### Assessment(s) for Lesson

The teacher will use formative assessment by listening to the class discussion.

### Teacher Notes

#### Communication Styles

##### Aggressive

- Overpowering, controlling, bossy, or dominating
- Responds to conflict by verbally or physically attacking the other person
- Blames other people, rarely willing to admit or accept responsibility for self
- **Violates other people's rights in order to get what is wanted**

##### Passive

- Avoids dealing with problems
- Does not speak up for self
- Worries about pleasing others and does not satisfy self
- "Stuffed" anger may result in explosive anger or internalized as anxiety or depression

##### Passive-Aggressive

- Feelings are communicated in an indirect, dishonest, manipulative, or underhanded way
- Seems to be passive because real conflict is not directly addressed

- Actually responds by “getting back at” or “getting even with” the person

**Assertive**

- Clear, confident, and seemingly in control
- Stands up for rights while respecting the rights and boundaries of others
- Verbal communication is direct, honest, and respectful
- Able to say NO if uncomfortable or unwilling to compromise own values, beliefs, or boundaries

### ***Physical Boundaries***

- Physical closeness
- Touching
- Sexual behavior
- Eye contact
- Privacy mail, email, diary, doors, nudity, bathroom, bedroom, telephone, cell phone, privacy spaces, etc.
- Clothes
- Gifts
- Time and energy

### ***Mental/Emotional Boundaries***

- Beliefs
- Thoughts and ideas
- Feelings
- Decisions
- Choices
- Needs
- Interests
- Responsibilities
- Confidences
- Secrets
- Roles
- Rules
- Personal experiences

**Building Blocks for Healthy Relationships- Check Yourself!**

Place a check mark after each statement to show your level of agreement or disagreement:

	Agree	Neutral	Disagree
1. If safe to do so, people should speak up for someone who is being insulted.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Television shows, movies, and even song lyrics can have an effect on a person's beliefs and behaviors.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. It's no big deal to tell a guy that he's "acting like a girl" to make a joke.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Teasing others is okay as long as they are not physically hurt.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. You should expect other people to figure out how you feel.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Rating a girl's looks on a scale of 1-10 is disrespectful.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I don't believe that there are hidden messages behind TV shows, movies, magazines, or ads/commercials.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Acting aggressively always makes people respect you more.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. It is better if girls do typical "girly" stuff and guys do typical "manly" stuff.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. As long as I don't behave violently in a relationship, then I'm promoting safe and respectful relationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. It is better just to keep my values and beliefs to myself than to stand up for them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. It is harmful to make a general statement like, "all girls gossip," or "boys don't have feelings."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To tally your score, give yourself points for A (Agree), N(Neutral), or D (Disagree) as listed in the answer key below for each statement. Total your score and then find your results in the ranges listed in the box to the right.

Score:

Tally:

- 1: A(3 pts), N(2 pts) D (1 pts) \_\_\_\_\_
- 2: A(3 pts), N(2 pts) D (1 pts) \_\_\_\_\_
- 3: A(1 pts), N(2 pts), D (3 pts) \_\_\_\_\_
- 4: A(1 pts), N(2 pts), D (3 pts) \_\_\_\_\_
- 5: A(1 pts), N(2 pts), D (3 pts) \_\_\_\_\_
- 6: A(3 pts), N(2 pts) D (1 pts) \_\_\_\_\_
- 7: A(1 pts), N(2 pts), D (3 pts) \_\_\_\_\_
- 8: A(1 pts), N(2 pts), D (3 pts) \_\_\_\_\_
- 9: A(1 pts), N(2 pts), D (3 pts) \_\_\_\_\_
- 10: A(1 pts), N(2 pts), D (3 pts) \_\_\_\_\_
- 11: A(1 pts), N(2 pts), D (3 pts) \_\_\_\_\_
- 12: A(3 pts), N(2 pts) D (1 pts) \_\_\_\_\_

**TOTAL:** \_\_\_\_\_

**30 – 36-** Wow! It seems like you have really spent some time developing healthy attitudes and beliefs. Remember to keep examining them, "checking" yourself, and learning more, so you can keep up the great work. The future is bright for you to have safe and respectful relationships!

**21 – 29-** You might want to take a closer look at healthy versus unhealthy attitudes you might have. The healthier beliefs you have, the better your chances are to have safe and respectful relationships. Take some time to examine your beliefs more, and learn more about the foundation for healthy relationships by surfing [www.safeandrespectful.org](http://www.safeandrespectful.org) and other links. Don't stop now- safe and respectful relationships are in your reach!

**12 – 20-** Hey! The time is now to work on developing healthy attitudes. Otherwise, your relationships might not work out, but YOU have the power to change that! It may take some time, but you are worth it, and so are your relationships! If you really take a closer look at examining your beliefs, learn more about the foundation for healthy relationships by surfing [www.safeandrespectfu.org](http://www.safeandrespectfu.org) and other links, you can look forward to great relationships!

## ***Communication (Styles) Situations***

### **Aggressive**

- Overpowering, controlling, bossy or dominating
- Responds to conflict by verbally or physically attacking the other person
- Blames other people, rarely willing to admit or accept responsibility for own part in the conflict
- Violates other people's rights in order to get what he or she wants

### **Passive**

- Avoids dealing with problems
- Does not speak up for his or her rights, worried instead about pleasing others (results in own needs not getting met)
- "Stuffed" anger may result in explosive anger or become internalized as anxiety and/or depression

### **Passive-Aggressive**

- Feelings are communicated in an indirect, dishonest, manipulative, or underhanded way
- Seems to be passive because conflict is not directly addressed
- Actually responds by "getting back at" or "getting even with" the person they are angry with

### **Assertive**

- Clear, confident, and seemingly in control
- Stands up for his or her rights while respecting the rights and boundaries of others
- Verbal communication is direct, honest, and respectful
- The ability to say "no" to something she or he is uncomfortable with or unwilling to compromise own values, beliefs, or boundaries

Can you recognize the four types of communication? In your group, discuss a situation between Kendra and Will. Read aloud each of Kendra's four possible responses. Decide what Kendra's communication style is in each response: **Aggressive, Passive, Passive-Aggressive or Assertive**. Be prepared to share your group's reasoning with the class.

**The Situation:** Will and Kendra made plans to meet at a party at 8 p.m. The party was given by a friend of Will's. Will was 45 minutes late. Kendra hardly knew anyone at the party, so she was very uncomfortable being there alone.

### **The Responses**

1. When Will shows up, Kendra kisses him hello and acts like nothing is wrong. When Will says "Sorry I was late," Kendra says "It's okay." **Style used:**
2. When Will shows up, Kendra says hello and asks to speak with him alone for a minute. She says, "Will, you were 45 minutes late, and I was really uncomfortable being here alone because I don't know anyone here. What happened?" She gives him a chance to explain and after Will apologizes she says, "I accept your apology, but I don't like to be kept waiting. Next time, I want you to call if you're going to be late." **Style Used:**

3. When Kendra sees Will coming, she starts flirting with another guy, thinking that will teach him not to make her wait. **Style used:**
4. When Will shows up, Kendra goes off on him. Before he even gets a chance to say anything, she is yelling at him in front of everyone. **"Where the (bleep) were you? Who do you think you are making me wait for you for 45 minutes, you inconsiderate (bleep)! Now you can forget this party, we're leaving!"** **Style used:**

\*Adapted from *The Teen Relationships Workbook*, Wellness Reproductions and Publishing, Inc., 2001

### ***Practice Boundary Setting***

*Boundaries are the limits that we set with people. Abuse happens when one person violates another person's boundaries. That is why it is so important to know what your boundaries are and to be clear with others about them. If you have boundaries that are unclear, others may be more likely to violate them; if you have clear boundaries, you will have a better chance of staying in control of your life and keeping yourself physically and emotionally safe.*

Decided whether each situation below is an example of setting clear boundaries or is an example of unclear boundaries. Write CLEAR or UNCLEAR on the line.

1. Jason and Tina started dating a few weeks ago. They are playing around when Jason smacks Tina in the head. **Respectfully, but without smiling or laughing, Tina says, "I know you're only playing, but I don't like people putting their hand on me like that."**  
\_\_\_\_\_
2. Niki and Tyra are at the mall. Tyra tells Niki that she is going to slip a lipstick into her purse. **Niki says, "I'm not into that. Don't do it while I'm around because I don't plan on getting into trouble. If I knew you were planning this, I wouldn't have come with you."** \_\_\_\_\_
3. Kimmie and Eric are making out. **Eric starts to unbutton Kimmie's shorts, and she does not want to go any further. She shyly says, "Umm, I don't know if we should do this." Eric says, "It's okay, don't worry," and continues.** Kimmie lets him even though she feels really uncomfortable. **Finally, she says, "You know, it's getting late, I better get home."** \_\_\_\_\_

Now, help the following teens set strong boundaries by writing on the line what they should say or do:

1. **Rachel forgot her homework at Derek's house and snaps, "Why didn't you remind me to get my homework—now I'm going to fail!"** (What can Derek say to set boundaries in terms of what he will take responsibility for?)  
\_\_\_\_\_
2. Lashonda lent Amber \$10 weeks ago, and she has not paid her back. Now she is asking to borrow money again. (What can Lashonda say to set boundaries in terms of lending and borrowing money?)  
\_\_\_\_\_
3. **Becky's boyfriend wants to come over tonight, even though he knows she has been planning a "girls' night" for weeks.** He is giving her a guilt trip, **saying, "Nice, you're choosing your friends over me. So I guess they are more important!"** (What can Becky say to set boundaries in terms of her time and her plans?)  
\_\_\_\_\_

Set your own boundary. Think!!! Is there a boundary that you need to set in a relationship that you have?

Person I need to set a boundary with: \_\_\_\_\_

Boundary I need to set: \_\_\_\_\_

What can I say or do to set this boundary? \_\_\_\_\_

\_\_\_\_\_

\*Adapted from *The Teen Relationships Workbook*, Wellness Reproductions and Publishing, Inc., 2001

## *Health Education Lesson Plan – Lesson Two*

**Title: Gender Roles and the Media**

**Big Idea: Health is Personal Power**

### 9-12 Unit Cluster Enduring Understandings

- Health is important and personal actions will impact self and others in many ways.
- Internal and external factors influence personal and community health
- Choosing health resources require critical evaluation and analysis
- Refusal, negotiation, and collaboration skills will enhance the health of self and others
- There are barriers that can hinder healthy decision-making
- Several factors influence the formation, achievement and evaluation of a long term personal health plan
- People have the power to create change

### Lesson Essential Question(s)

- How does gender stereotyping affect relationships?
- Can I deconstruct media messages?

### Delaware Health Education Standards

#### Health Concepts

- Tobacco, Alcohol & Drugs**
- Injury Prevention & Safety**
- Nutrition & Physical Activity**
- Family Life & Sexuality**
- Personal Health & Wellness**
- Mental Health**
- Community & Environmental Health**

#### Skills

- INF**
- AI**
- IC**
- DM**
- GS**
- SM**
- AV**

### Lesson Summary

Students will explore how gender stereotyping can limit relationships and can lead to abuse or violence. Students will deconstruct media messages to examine the proper meaning of how people can be influenced in their relationships.

Students will know...	Students will be able to...
<ul style="list-style-type: none"> <li>• The difference between biological sex and gender</li> <li>• Gender stereotyping can result in discrimination</li> <li>• Media messages are constructed</li> </ul>	<ul style="list-style-type: none"> <li>• Recognize how gender stereotypes are limiting and/or disrespectful</li> <li>• Choose to respect people for their individuality</li> <li>• Resist and challenge unhealthy cultural norms</li> <li>• Practice critically analyzing media messages</li> </ul>

## Time

One class period.

## Materials and Preparation

Copy of worksheet, [Examining Media Messages](#), for each student.

Teacher-selected ads from magazines, recent newspapers, internet, or TV that depict gender stereotypes for the Examining Media Messages Worksheet. (NOTE: Good sources include Teen Cosmo magazine, [www.about-face.org](http://www.about-face.org)—Gallery of Offenders, or print the latest album covers from [www.billboard.com](http://www.billboard.com)).

## Resources and Web Links

<http://www.nmmlp.org> – **New Mexico Media Literacy Project**

<http://www.medialit.org/> – **Center for Media Literacy** offers one of the most comprehensive catalogs of videos, books, and other curricular materials related to media literacy. The site also includes a reading room on media literacy issues, FAQs, and more.

<http://community.pflag.org> – **PFlag: From Our House to the Schoolhouse** offers tools for teachers and parents for creating safe schools and responding to harassment and bullying. PFlag stands for "Parents, Friends and Families of Lesbians and Gays," and they offer a host of supportive resources in addition to the safe schools resources.

<http://www.genderads.com> – **Gender Ads** on gender and advertising, featuring over 2,500 different ads showing how gender stereotypes are used in advertising.

<http://www.about-face.org> – **About Face's** mission is to equip girls and women with tools to understand and resist harmful media messages that affect self-esteem and body image.

<http://www.safeschoolscoalition.org/safe.html> – **The Safe Schools Coalition** offers a wide variety of resources for teachers and parents, including an excellent list of books that address gender stereotyping at:

[http://www.safeschoolscoalition.org/RG-library\\_media.html](http://www.safeschoolscoalition.org/RG-library_media.html).

## Teaching Steps

1. Brainstorm a definition of stereotype (characterization based on conscious or unconscious assumptions that some one aspect—such as gender, age, ethnic or national identity, religion, occupation, marital status, etc.—is predictably accompanied by certain character traits, actions, even values).
  - How do we stereotype others (sex, religion, size, etc.)?
  - The term is often negative, denying others respect or legitimacy.
  - Stereotypes often form the basis of prejudice/discrimination and are often used to explain real or imaginary differences due to race, gender, religion, age, ethnicity, socioeconomic class, disability, occupation, and others.
  - Stereotypes are forms of social consensus rather than individual judgments.
2. In small groups, students will choose a recorder/reporter to think about: Are males/females or girls/boys stereotyped because of their sex?
  - All students will fold a sheet of paper in half, labeling one half GIRL and one half BOY.

- For one minute, ask students to list things associated with being a girl and then one minute to list things associated with being a boy. Then share with the group.
- On the whiteboard or Smartboard, draw a diagonal line with Girl on one side of the line and Boy on the other side.
- Have reporters write three things under each category from their list until all have shared their lists.
- Facilitate a discussion that encourages students to realize that not all girls and not all boys follow the expected behaviors and choices that some people expect of them.
- Prompts:
  - ♦ Are males and females given the same messages or treated the same when it comes to sports?
  - ♦ What are acceptable/unacceptable ways for a young man to express his feelings? For a young woman?
  - ♦ What colors are encouraged for males and females? Are they the same?
  - ♦ What kinds of toys are boys and girls given as children? Are they the same?
  - ♦ What is expected of males regarding sexual thoughts and sexual activity? What is expected of females?
  - ♦ Are certain professions more acceptable for males or females?
- Examples of stereotyping messages are:
  - ♦ Act Like a Man: **be hard, don't cry, be in control, aggressive, athletic, don't play with dolls, pay the bills, have as much sex as you can (with women).**
  - ♦ Act Like a Lady: **have good hygiene, sit with your legs crossed, don't cuss, don't fight, be polite, be sexy (but not too sexy), think about **other's** feelings.**

### Discussion Questions

- Do all males and all females fit on one list?
  - Does everyone agree on what is listed in each column? Discuss individuality.
  - Are all gender stereotypes negative characteristics?
  - What are the dangers of stereotypes? (They tend to pressure us to fit in as males and females rather than individuals.)
  - How could some of the beliefs about males and females contribute to or support abusive behaviors in a relationship?
  - Can gender stereotypes such as these determine our expectations of our dating partners (and others in general)?
3. Summing it up: What happens when someone does not act as they are expected to act?
    - What it means to be a man or a woman is defined more by our culture than biology.
    - Current definitions of gender limit both men and women.
    - Even an open mind does not prevent people from thinking in and reinforcing stereotypes.
    - Messages come from everywhere: teachers, family, TV, music, etc.
    - Everyone chooses which messages to accept.
    - Being aware of the content of messages helps us make good choices.
  4. Students will consider how the media contributes to personal attitudes about being male and female.
    - Hand out worksheet, *Examining Media Messages*, and a media example that depicts gender stereotypes.
    - Working in pairs, students complete the worksheet.
    - Have pairs report their findings to the class.
    - Teacher-led discussion:

- ♦ Why is it important to recognize the impact of the media on our thinking, especially regarding our relationships?
  - ♦ How can the media cause us to change the humans we see into objects? (Objectification)
  - ♦ How can seeing and hearing things over and over desensitize us? (Desensitization refers to the normalization of something. The lyrics to songs where the women are referred to with derogatory names, videos that show violence as the norm, etc., reinforce stereotypes and become something that happens to THOSE people, not us).
  - ♦ How could these things change our values over time?
  - ♦ Introduce the term “media literacy” using the activity just completed and the information in Teacher Notes.
  - ♦ Tell students they have just learned an important life skill for being an independent and thoughtful consumer.
5. Students will access a media message that perpetuates gender stereotyping and write a **five paragraph essay deconstructing the message**. Suggest that they use today’s worksheet, Examining Media Messages, for guidance. This may be completed at home and turned in at the next class.

### Assessment(s) for Lesson

- Examining [Media Messages Worksheet](#)
- Homework writing assignment deconstructing a media message

### Teacher Notes

#### Definitions to know when talking about GENDER:

Biological sex refers to being categorized as either male or female based on our anatomical parts.

Gender is a psychosocial construct most people use to classify a person as male, female, both, or neither.

Once people are assigned a biological sex, our culture and society have created Gender Expectations around how that person should act. Females are **expected to “act feminine,”** and males are expected to “act masculine.” Expectations about gender may change from culture to culture, and they may also change over time. Gender Identity is a person’s sense of their own gender. Since most people conform to societal gender expectations, they have a Gender Identity congruent with their Biological Sex. For some people, Gender Identity, Biological Sex, and how they outwardly communicate their gender to others do not correspond with each other or with society’s gender expectations.

Transgender is an umbrella term used to describe people who have gender identities, expressions, or behaviors not traditionally associated with their Biological Sex. Transgender also can mean anyone who transcends the conventional definitions of “man” and “woman.”

Adapted from *Gender Education & Advocacy, Inc.*  
<http://www.gender.org/resources/dge/gea01004.pdf>

Teachers can send healthy gender messages to their students. Here are some suggestions to help you get started.

**Do:**

- Make your classroom gender neutral. Have pictures of both girls and boys doing non-stereotypical activities.
- Have open discussion on gender stereotypes and work them into whatever subject you teach. Talk about gender stereotypes in the books they read or talk about male and female scientists.
- Encourage boys and girls equally to succeed. Show them that gender will not dictate who they become.
- Refrain from promoting unhealthy gender messages in and out of the classroom. For example, if you are a coach, do not use gender terms in a derogatory manner to **discipline male athletes, such as "You throw like a girl!" or "Don't be such a sissy!"**
- Examine your gender choices. Do you put all the girls in a group? Are boys given different projects than the girls? Do you call on more girls than boys?
- Encourage both girls and boys to explore what makes them happy whether that is sports, music, science, or videogames.
- Use language that is not gender restricted. Talk about professions in a non-gendered way. For example, use the term police officers instead of policemen and the term flight attendant instead of stewardess.

**Media Literacy**

Media Literacy is the ability to read, understand, and deconstruct media images and messages. Learning to question images and messages is a critical first step to becoming an active, thoughtful consumer of the media and, consequently, an independent thinker capable of resisting and challenging unhealthy cultural norms.

The five key concepts of media literacy are:

1. All media messages are "constructed."
2. Each form of media has different characteristics, strengths, and a unique "language" of construction.
3. Different people experience and interpret the same media message in different ways.
4. Media messages are produced for particular purposes, including education, profit, and to gain power.
5. Media messages have embedded values and points of view.

**Basic Tools of Persuasion**

The following are some strategies that the media uses to inform, entertain, attract attention, and persuade us to want what is being advertised

- **Association:** Tries to link a product, service, or idea with something already liked or desired by the target audience, such as fun, pleasure, beauty, security, intimacy, success, wealth, etc. The media message does not make explicit claims that you will get these things; the association is implied.
- **Bandwagon:** Many ads show a lot of people using the product, implying that "everyone is doing it." No one likes to be left out or left behind, and these ads urge us to "jump on the bandwagon."

- **Beautiful people:** Using good-looking models (who may also be celebrities) to attract our attention. This technique is extremely common in ads, which may also imply (but never actually promise) that we will look like the models if we use the product.
- **Fear:** This is the opposite of the Association technique. It uses something disliked or feared by the intended audience (like bad breath, failure, high taxes, or terrorism) to **promote a "solution."** The media often tries to make us afraid that, if we do not do or buy something, something bad could happen to us, our families and friends, or our country
- **Humor:** Many ads use humor because it grabs our attention and it is a powerful persuasion technique. When we laugh, we feel good. Advertisers make us laugh and then show us their product or logo because they are trying to connect that good feeling to their product. They hope that when we see their product in a store, we will subtly re-experience that good feeling and select their product.
- **Fun:** In these ads everyone is happy, smiling, and laughing. There are often images of people doing fun things and having a good time, which implies that, if we use the product, we too can be happy and have a good time.
- **Sexy:** The emphasis in these ads is on physical attributes of models, usually female; may wear revealing clothing and be shown flirting through attitude or body language.
- **Wealth:** The ad uses expensive and elegant places and things, such as big houses, new cars, jewelry, designer clothing, etc., to persuade.
- **Repetition:** Advertisers use repetition in two ways. Within an ad, words, sounds, or images may be repeated to reinforce the main point. And, the message itself (a TV commercial, a billboard, a website banner ad) may be displayed many times. Even unpleasant ads and political slogans work if they are repeated enough to pound their message into our minds.

Information adapted from the Center for Media Literacy [www.medialit.org](http://www.medialit.org) and the New Mexico Media Literacy Project [www.nmmlp.org](http://www.nmmlp.org).

Studies show that media education is most effective when it includes:

- Both media analysis and production
- Teacher-created combinations of activities rather than off-the-shelf curricula
- Coordinated efforts across all subject areas

Therefore, to make the most of your efforts, try to work with other teachers in your school to incorporate information on media literacy into additional subject areas. For example:

- Art students can examine the use of design elements or trickery in advertising;
- Language arts students can write letters to manufacturers or specific companies explaining why messages in their advertising are disrespectful;
- Math students can analyze ratios of healthy vs. unhealthy messages in specific magazines;
- Nutrition students can examine messages around health and body image in media; and
- Social studies students can report on trends in advertising.

Retrieved from [http://www.safeandrespectful.org/teachers/media\\_home.html](http://www.safeandrespectful.org/teachers/media_home.html)

### ***Examining Media Messages***

Every media message has been constructed by someone. You can deconstruct media messages by examining them closely and carefully looking beneath the surface to understand their deeper meanings. Deconstruction is the process of examining how the media message communicates its meaning. Any piece of media can be examined this way. Answer the following questions about the advertisement you have chosen.

1. Who created the message?
2. What is the purpose of the message?
3. What are the different tools of persuasion used in this message?
4. What lifestyles, values, and points of view are represented in and/or left out of this message?
5. How are females represented in this image?
6. How are males represented in this image?
7. How might different people understand this message differently from you?
8. In what ways is the [message healthy or unhealthy](#)? How do you think that messages like this could impact relationships?

Information adapted from the Center for Media Literacy [www.medialit.org](http://www.medialit.org) and the New Mexico Media Literacy Project [www.nmmlp.org](http://www.nmmlp.org)

## *Health Education Lesson Plan – Lesson Three*

**Title: Interpersonal Abuse vs. Equality**

**Big Idea: Health is Personal Power**

### 9-12 Unit Cluster Enduring Understandings

- Health is important and personal actions will impact self and others in many ways.
- Internal and external factors influence personal and community health
- Choosing health resources require critical evaluation and analysis
- Refusal, negotiation, and collaboration skills will enhance the health of self and others
- There are barriers that can hinder healthy decision-making
- Several factors influence the formation, achievement and evaluation of a long term personal health plan
- People have the power to create change

### Lesson Essential Question(s)

How can I recognize a cycle of abuse?

### Delaware Health Education Standards

Health Concepts	Skills
<input type="checkbox"/> <b>Tobacco, Alcohol &amp; Drugs</b>	<input checked="" type="checkbox"/> <b>INF</b>
<input checked="" type="checkbox"/> <b>Injury Prevention &amp; Safety</b>	<input type="checkbox"/> <b>AI</b>
<input type="checkbox"/> <b>Nutrition &amp; Physical Activity</b>	<input checked="" type="checkbox"/> <b>IC</b>
<input checked="" type="checkbox"/> <b>Family Life &amp; Sexuality</b>	<input type="checkbox"/> <b>DM</b>
<input checked="" type="checkbox"/> <b>Personal Health &amp; Wellness</b>	<input type="checkbox"/> <b>GS</b>
<input type="checkbox"/> <b>Mental Health</b>	<input checked="" type="checkbox"/> <b>SM</b>
<input type="checkbox"/> <b>Community &amp; Environmental Health</b>	<input type="checkbox"/> <b>AV</b>

### Lesson Summary

Students will explore how gender stereotyping can limit relationships and can lead to abuse or violence. Students will deconstruct media messages to examine the proper meaning of how people can be influenced in their relationships.

Students will know...	Students will be able to...
<ul style="list-style-type: none"> <li>• What constitutes abusive behaviors in relationships</li> <li>• What are respectful behaviors in relationships</li> </ul>	<ul style="list-style-type: none"> <li>• Recognize a cycle of abuse</li> <li>• Recognize warning signs that may lead to abuse in relationships</li> </ul>

### Time

One class period.

## Materials and Preparation

- Computer access for PSA.
- Worksheet, "[How to Help a Friend Scenario](#)," has four scenarios. Copy one scenario for each student.
- TV/Projector to play PSAs.

## Resources and Web Links

- [www.loveisrespect.org](http://www.loveisrespect.org)
- [www.seeitandstopit.org](http://www.seeitandstopit.org)
- [www.thesafespace.org](http://www.thesafespace.org)
- National Teen Dating Abuse Helpline 1-866-331-9474

## Teaching Steps

1. Teacher introduction of Power and Control vs. Equality in a relationship.
  - What does interpersonal mean? (between two people)
  - How could we define interpersonal abuse? (the misuse of power in order to hurt or control another person)
  - What are the four types of abuse? (physical, verbal, emotional/mental, and sexual)
  - What are some examples of each type of abuse?
  - Why do people use these behaviors? (to gain and maintain control in a relationship)
  - **Important** – Emphasize that, although we have all used some behaviors that are considered abusive, that does not make us all abusive people. It is the frequency and intensity of abusive behaviors that indicates whether or not someone is abusive.
2. Have students write "Characteristics of Equal Power Relationships" on one side of a sheet of paper.
  - List characteristics of an equal power relationship. (respect, equality, open communication, honesty, freedom, space, acceptance, boundaries, caring feelings, support, etc.)
  - Have volunteers share with the class.
3. Draw a circle on the board to represent the cycle of abuse. (tension building, explosion, honeymoon)
  - Have students turn their papers over and write Cycle of Abuse.
  - Have students write and brainstorm warning signs of an abusive relationship. (such as: extreme jealousy, checking up on partner, telling partner what to wear, restricting partner conversations, **putting down their partner's opinions and feelings**, constantly calling and texting and demanding immediate response, blaming partner for own anger, violating boundaries, has history of abuse, holding rigid view of roles of men and women, etc.)
  - Emphasize paying attention to warning signs, comparing to equal power relationships, asking for help, terminating relationship early.
4. Review the following one minute Teen Dating Violence PSAs:
  - "Text Messaging" – Available on <http://www.safeandrespectful.org/media/psa.html>
  - "Girls" and "Boys" – Available on <http://seeitandstopit.org/pages/getorg/gallery.html>
5. **Activity:** "[How to Help a Friend Scenarios](#)"
  - Divide the class into small groups and distribute a scenario from the worksheet.
  - Have each group complete a different "How to Help a Friend Scenario."

- After each group has crafted their responses, have the student groups share the scenarios with the class.
6. Students will write a three-minute compare/contrast statement on Abuse vs. Equal Power in a Relationship. If there is insufficient class time, this may be assigned as home work.
  7. Post resources such as [www.loveisrespect.org](http://www.loveisrespect.org) (the National Teen Dating Helpline) on the smartboard or on "bumper stickers.
  8. Have students consider their Support Network (group of family, friends, etc.) who could be counted on to help with their relationships).
    - Students will fold a single sheet of paper in eight sections.
    - On each section, students will list names and phone numbers of people or places they could access if a situation required guidance or help: family members, counselor, church, dating partner, crisis hotline, health clinic, team or club, coworker or boss, school teacher, youth/community center, etc.
    - Ask students to keep their information readily available but in a private place.

### Assessment(s) for Lesson

Abuse vs. Equal Power in a relationship Compare/Contrast Statement

### Teacher Notes

#### Examples for Forms of Abuse

All forms of abuse have an emotional impact.

**Physical:** Pushing, shoving, hitting, slapping, punching, grabbing, shaking, kicking, choking, biting, spitting, burning, pulling hair, pulling arm, bending fingers, restraining (holding someone down or holding their arm so they cannot walk away), throwing objects at another person, use of weapons to hurt or threaten someone, carrying someone against their will, trapping someone in a room or car, chasing, blocking someone from leaving a room/car, hiding keys, shoes, clothes or money so the other person can't leave, etc.

**Verbal:** Put downs, insults, calling names (telling them they are stupid or ugly, that they are not good enough, etc.), degrading them (making them feel ashamed), frequently cursing or yelling at another person, threatening or intimidating (making the other person feel nervous or scared), frequently criticizing or correcting the other person (the way they look, talk, act, etc.).

**Mental/Emotional/Psychological:** Controlling behavior (telling them who they can hang out with, what to wear, what to do, expecting to know where they are at all times, making all of the decisions, etc.), possessiveness (wishing to control somebody exclusively or to be the sole object of somebody's love and affection) playing mind games, minimizing the other person's feelings, blaming them for the abuse, using guilt trips (trying to make the other person feel guilty when you do not get your way especially by threatening to hurt yourself or commit suicide), embarrassing or humiliating the other person in public, ignoring or withholding affection as punishment, manipulating them (by threatening to break up with them if you do not get your way), accusing the other person of making them mad, cheating on them, etc., being extremely jealous and using jealousy to justify controlling behavior, etc.

**Sexual:** Unwanted touching or grabbing, rape (forced penetration), unwanted or forced sexual acts (of any nature including forcing them to take off their clothes, to watch others having sex, to engage in sexual acts with a third person), coerced sexual acts (like threatening to break up with someone, spread rumors about them, threatening to hurt them or someone they care about if they refuse and/or lying to or manipulation of someone to get him/her to agree to sexual behavior), purposely exposing to STDs, having sex with another person if they are too drunk/high to refuse, withholding sex as a way of manipulation someone into doing what you want, making jokes of a sexual nature that make the other **person uncomfortable, comments about a person's body that make them uncomfortable,** etc.

### **Details for Explaining the Cycle of Abuse**

Relationships do not start out being abusive. The beginning of all teenage dating relationships can be characterized by spending a lot of time together, having lots of fun, doing things that are exciting, acting good to try to impress each other, with a feeling that things will last like this forever. This is considered the **HONEYMOON** stage.

What happens once we get comfortable in relationships is that we start acting a little more like ourselves—some may see this as change but really it is about starting to be real. Arguments start and things are not so fairytale like. This is considered the **TENSION BUILDING** stage.

When disagreements start, as they are inevitable, if the relationship is not equal, if one of the partners wants control over the relationship, then they would use their power to hurt or control the other person. This is considered the **ABUSE** stage. (Even if not abusive per se, could it be considered respectful? If disagreements are not settled equally or respectfully, it is considered abuse.)

After the abuse occurs, the abusive person is usually very apologetic, makes excuses for the abuse, and/or promises that it will never happen again. Since we are all susceptible to not always fighting fairly and to saying things that we really do not mean, it is usually hard to **tell whether or not this person is "just having a bad day" or if they are being abusive,** so they are forgiven. This is considered the **MAKE-UP** stage. (People often do not recognize abuse until it is too late because it does not start as physical; however, physical abuse is what most people think of when they think of abuse.)

This is a cyclical pattern that occurs in abusive relationships and it usually gets worse as the pattern continues, because as it goes on it takes more for the abusive person to maintain control.

## ***How to Help a Friend***

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Instructions:** In groups, read and discuss the scenario below and answer the questions. Write your answers and hand to teacher at the end of class.

### **Scenario A**

Lately you have noticed that your friend, Tony, embarrasses his girlfriend whenever you are around. He makes fun of her, purposely ignores her, or threatens to break up with her if he is not getting his way. She usually ends up in tears, and he laughs about it.

### **Questions:**

*How do you feel when you see Tony act this way?*

*How do you think Tony's girlfriend feels?*

*Why do you think Tony acts this way?*

*As a friend, would you say or do something? To whom?*

*As a friend, what **exactly** could you say or do?*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Instructions:** In groups, read and discuss the scenario below and answer the questions. Write your answers and hand to teacher at the end of class.

**Scenario B**

Your friend Jacki has been acting strange lately, ever since her and her boyfriend Dave got more serious. She always seems to ask him if she can hang out with you and whenever you do make plans, she breaks them with some lame excuse. You have also noticed that she has stopped talking to her guy friends, even the ones she has been friends with since grade school. She gets real nervous when they try to talk to her. Today, you noticed a bruise on her thigh in gym class, and she told you some story about her dog.

**Questions:**

*How do you feel about Jacki's behavior?*

*How do you think Jack feels?*

*Why do you think Jack acts this way?*

*As a friend, would you say or do something? To whom?*

*As a friend, what **exactly** could you say or do?*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Instructions:** In groups, read and discuss the scenario below and answer the questions. Write your answers and hand the paper to the teacher at the end of class.

### **Scenario C**

Your friend Chris has been trying to break up with his girlfriend Tanya for weeks now, but every time he tells her he wants to break up, she threatens to kill herself. Other people have told him, “Who cares, break up with her,” but he actually **DOES** care. He definitely wants out of the relationship, but he does not want Tanya to hurt herself. He thinks he is “trapped” with her because of her threats.

### **Questions**

*How do you feel when you hear about Tanya’s threats and Chris’ situation?*

*How do you think Chris’ girlfriend feels?*

*Why do you think Tanya acts this way?*

*As a friend, would you say or do something? To whom?*

*As a friend, what **exactly** could you say or do?*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Instructions:** In groups, read and discuss the scenario below and answer the questions. Write your answers and hand the paper to the teacher at the end of class.

**Scenario D**

Your friend Shawn just found out that he got accepted into college for next year. He was really excited about it until he told his girlfriend, Hope. **She said to him, "I don't know why you're getting so excited; you'll never do good in college."** Anyway, college will only take time away from us." Shawn has not exactly been the best student in high school and he knows it, but he has tried really hard this past year to get his grades up. Shawn wonders if Hope is right because he thinks she knows him best.

**Questions:**

*How do you feel when you hear what Shawn said?*

*How do you think Hope feels?*

*Why do you think Shawn acts this way?*

*As a friend, would you say or do something? To whom?*

*As a friend, what **exactly** could you say or do?*

## *Health Education Lesson Plan – Lesson Four*

**Title: Respect**

**Big Idea: Health is Personal Power**

### 9-12 Unit Cluster Enduring Understandings

- Health is important and personal actions will impact self and others in many ways.
- Internal and external factors influence personal and community health
- Choosing health resources require critical evaluation and analysis
- Refusal, negotiation, and collaboration skills will enhance the health of self and others
- There are barriers that can hinder healthy decision-making
- Several factors influence the formation, achievement and evaluation of a long term personal health plan
- People have the power to create change

### Lesson Essential Question(s)

- What is respect?
- How does my respectful and disrespectful behavior influence the behavior of others towards me and other people?

### Delaware Health Education Standards

#### Health Concepts

- Tobacco, Alcohol & Drugs**
- Injury Prevention & Safety**
- Nutrition & Physical Activity**
- Family Life & Sexuality**
- Personal Health & Wellness**
- Mental Health**
- Community & Environmental Health**

#### Skills

- INF**
- AI**
- IC**
- DM**
- GS**
- SM**
- AV**

### Lesson Summary

Students will explore concepts related to respect and disrespect and recognize that showing or feeling disrespect can lead to violence.

Students will know...	Students will be able to...
<ul style="list-style-type: none"> <li>• What is respect for self and respect for others</li> <li>• The relationship between disrespect and violence</li> </ul>	<ul style="list-style-type: none"> <li>• Make a connection between expecting respect and showing respect for others</li> <li>• Decide between respectful and disrespectful behaviors</li> </ul>

### Time

One class period.

## Materials and Preparation

Large print copy of individual [Continuum of Harm Statements](#) for class activity.

## Resources and Web Links

- <http://www.yesinstitute.org> – **The YES Institute** works to prevent suicide and ensure the healthy development of gay, lesbian, bisexual, transgender, and all youth by initiating dialogue, providing education, and creating support systems.
- <http://www.groundspark.org> – **The “Respect for All” Project**, by GroundSpark, facilitates the development of inclusive, bias-free schools and communities by providing media resources, support, and training to youth, educators, and service providers. Their film, *Straightlaced*, features intimate interviews with teenagers about the pressure to conform to traditional gender roles.
- <http://www.tolerance.org> – **Teaching Tolerance** is a principal online destination for people interested in dismantling bigotry and creating, in hate's stead, communities that value diversity.
- <http://www.thegeenadavisinstitute.org> – **The Geena Davis Institute** educates entertainment creators and companies about the need to increase the number of girls and women in media that is aimed at kids and to reduce stereotyping of girls and women.
- [http://www.endabuse.org/content/action\\_center/detail/806](http://www.endabuse.org/content/action_center/detail/806) – **Coaching Boys Into Men** is a campaign of the Family Violence Prevention Fund about the importance of teaching boys early and often how to honor and respect women.
- <http://www.acalltomen.com> – **A Call to Men** is a national men's organization addressing men and boy's violence against women and the eradication of sexism.
- <http://www.hghw.org> – **Hardy Girls Healthy Women** (HGHW) strives to create a world in which all girls and women experience equality, independence, and safety in their everyday lives.
- <http://www.nonamecallingweek.org> – **No Name-Calling Week** is an annual week of educational activities aimed at ending name-calling of all kinds and providing schools with the tools and inspiration to launch an ongoing dialogue about ways to eliminate bullying in their communities.

## Teaching Steps

1. Brief review of [Lesson One](#) as a bridge to today's lesson about respect for self and others.
2. **Brainstorm a definition of “respect.”** (words or actions that acknowledge feelings, choices, and rights of an individual). **Add a note about “treating others as you wish to be treated.”**

Discussion questions:

- What are words or actions that show respect?
  - What items on your list should show up more in your life?
  - Is there ever a time that you have shown someone disrespect?
  - What are some ways that you can show respect for yourself and others?
  - How does being disrespectful relate to violence/abuse? (Teacher tip: We often show or respond to disrespect in a verbally/physically abusive way.)
3. **Draw a horizontal line on the board to represent a “continuum of harm.”** The line should be labeled: not harmful----- harmful-----most harmful

- Hand out the [Continuum of Harm](#) statements to volunteers who will place the statements along the continuum. Ask the volunteers to tell why they chose the placement and if they consider the statements to be very respectful, respectful, or disrespectful.
  - After all statements have been placed on the continuum, start at one end and read a statement aloud and ask the class to decide if it should be moved and for what reason.
  - Discuss important concept: disrespect is a major contributor to abuse in relationships. When someone is not honest or caring, does not have empathy, does not treat people as they wish to be treated, they are being disrespectful. Being disrespectful is when you do not **acknowledge other people’s feelings, choices, and rights**. A response to disrespect can be physical or verbal abuse.
4. Conclude with a short discussion of how what may seem like a funny comment may be hurtful to the receiver. Ask students to write a short reflection about a time someone made a hurtful/disrespectful comment about them and how it made them feel and act.

### Assessment(s) for Lesson

Formative assessment

### Teacher Notes

By promoting a respectful school climate, we are also guiding students towards a path to social justice. **There are many harmful messages in society today about “respect,”** confusing it with fear, intimidation, or unyielding power. The real meaning of respect has nothing to do with exerting power and control. It is important to teach our young people that respect is about celebrating differences, **acknowledging validity in others’ perspectives**, believing in the value of oneself and other people, assuming goodwill, and treating all people with dignity.

By embracing diversity, we are teaching young people to celebrate differences, value and others, and learn about and interact with people different than themselves. For example, since disrespect for women and girls and treating them with less value is still pervasive in our world today, it is critical that we actively provide consistent messages to boys and young men about how to value and respect girls and women.

Often the concept of promoting respect in education is discussed in reference to school climate and the issue of bullying. As educators, it is imperative that we educate ourselves around social justice issues related to homophobia, racism, and sexism, among other forms of oppression, and understand their clear connections to bullying and harassment.

Consider this research regarding the root of bullying:

- Two-thirds (65%) of teens report that they have been verbally or physically harassed or assaulted during the past year because of their perceived or actual appearance, gender, sexual orientation, gender expression, race/ethnicity, disability, or religion. Source: Harris Interactive and GLSEN (2005). From Teasing to Torment: School Climate in America, A Survey of Students and Teachers. New York: GLSEN.

You can promote respect in your classrooms by:

- Establishing boundaries with your students and teaching them [how to set and respect boundaries](#).
- Using [assertive communication](#) with students and teaching students to do the same.

- Engaging students in taking responsibility for naming, preventing, and responding to disrespectful words or acts. Examples include giving students assignments to observe and record acts of harassment based on gender, ability, appearance, sexual orientation, race, language, religion, or social class, or having students brainstorm ways to find solutions, change such social norms, and protect classmates from these types of harmful acts.
- Promote activities that build community and connect students across divisive lines.

Retrieved from [http://www.safeandrespectful.org/teachers/respect\\_home.html](http://www.safeandrespectful.org/teachers/respect_home.html)

***Continuum of Harm Statements***

*Not saying or doing anything when you see someone hitting someone else.*

*Believing that when a woman/girl says no to sex that you just have to try a little harder.*

*Telling a guy that he throws like a girl.*

*Using the expression "that's so gay" as a put-down.*

*Using racial slurs.*

*Honking or whistling at a girl walking down the street.*

*Using alcohol or drugs to "loosen a girl up."*

*Yelling at your boyfriend/girlfriend for talking to another girl/guy.*

*Grabbing a girl's/guy's butt as they walk down the hallway.*

*Expecting a guy to pay for a date.*

*Posting/sharing/forwarding a suggestive photo of someone.*

*Listening to songs with violent lyrics.*

*Calling a girl a sexually explicit name.*

*Calling a boy a sexually explicit name.*

## *Health Education Lesson Plan – Lesson Five*

**Title: Courageous Bystander**

**Big Idea: Health is Personal Power**

### 9-12 Unit Cluster Enduring Understandings

- Health is important and personal actions will impact self and others in many ways.
- Internal and external factors influence personal and community health
- Choosing health resources require critical evaluation and analysis
- Refusal, negotiation, and collaboration skills will enhance the health of self and others
- There are barriers that can hinder healthy decision-making
- Several factors influence the formation, achievement and evaluation of a long term personal health plan
- People have the power to create change

### Lesson Essential Questions

- How can I make a difference by being a courageous bystander?
- How can I be part of the solution?

### Delaware Health Education Standards

#### Health Concepts

- Tobacco, Alcohol & Drugs**
- Injury Prevention & Safety**
- Nutrition & Physical Activity**
- Family Life & Sexuality**
- Personal Health & Wellness**
- Mental Health**
- Community & Environmental Health**

#### Skills

- INF**
- AI**
- IC**
- DM**
- GS**
- SM**
- AV**

### Lesson Summary

Students will explore the use of the “courageous bystander” as a way to end abuse in our culture. They will be advocates for change. In addition, they will create a list of people in their support network who could be accessed for help and guidance in personal relationships.

Students will know...	Students will be able to...
<ul style="list-style-type: none"> <li>• What a courageous bystander is.</li> <li>• Everyone can make a difference.</li> </ul>	<ul style="list-style-type: none"> <li>• Advocate for personal attitudes, beliefs, and behaviors that support healthy relationships.</li> </ul>

### Time

One class period.

## Materials and Preparation

- TV/projector to play PSA
- Copies of worksheet, [Courageous Bystander Scenarios](#), for groups
- Copies of worksheet, [How Can I Be Part of the Solution](#), for groups

## Resources and Web Links

- [www.safeandrespectful.org/media/psa.html](http://www.safeandrespectful.org/media/psa.html) for PSAs advocating Courageous Bystanders
- [www.youthnoise.com](http://www.youthnoise.com) – **Youth Noise** is a web-based program created to motivate young people ages 13 to 26, to improve their lives and the lives of children and youth, worldwide, through volunteering, fundraising, and speaking out.
- <http://www.groundspark.org/respect/index.html> – **Groundspark's** mission is to create visionary films and dynamic educational campaigns that move individuals and communities to take action for a more just world.
- <http://www.tolerance.org> – **Tolerance.org** is an online destination for people interested in dismantling bigotry and creating, in hate's stead, communities that value diversity. It includes information on how to transform yourself, your home, your school, your workplace, or your community

## Teaching Steps

1. Introduce concept of “courageous bystander” (see teacher notes) by facilitating discussion: How can you make a difference by being a courageous bystander?
  - What are some of the disrespectful language and attitudes you see and hear in school?
  - What are some of the strategies that you could use to respond in healthy ways?
  - Do you believe that you can help change the culture in which you live or is violence unstoppable?
  - How could acting as a courageous bystander help change our culture today?
2. Introduce transfer task and tie to the courageous bystander concept.
  - Assign a date for completion of task.
  - Choose whether the project will be shared with the class or displayed in a gallery walk.
3. Distribute worksheets, “[Courageous Bystander Scenarios](#)” and “[How Can I Be Part of the Solution?](#)” to groups for discussion.
  - Have each group report to the class.
  - Discussion points will include:
    - ♦ If you did not feel safe to respond as situations unfolded, you might speak to the person later on.
    - ♦ What do you think would happen if everyone stood up for their own values and beliefs?
    - ♦ Do you think people would be discouraged from using abusive language and behavior to get what they want?
    - ♦ Do you think disrespectful comments, jokes, and bad language would disappear if no one laughed?
    - ♦ How would it feel if you could make a difference in changing how a company made decisions about what products to market?
    - ♦ How would it feel if you could influence policies, practices, or laws that would permit violence, discrimination, and harmful stereotypes to continue and instead would allow healthy attitudes, beliefs, and relationships to thrive?

4. To conclude watch and discuss *Challenge the Norm* PSA or *Courageous Bystander* at <http://www.safeandrespectful.org/media/psa.html>.
5. Hand out Post Survey, and have the students fill out the survey using the same ID they used on the Pre Survey. **Collect and mail Information Survey form, Pre Survey and Post Survey to DELTA COORDINATOR, 507 PHILADELPHIA PIKE, WILMINGTON, DELAWARE 19809.**

### Assessment(s) for Lesson

### Teacher Notes

#### How Can You Make a Difference by Being a Courageous Bystander?

A **Courageous Bystander** is someone who takes an active role in promoting a respectful environment or anyone who does something to safely and responsibly interfere with abusive or disrespectful behaviors, statements, or attitudes. Courageous bystanders do not look away or remain silent when confronted with these things.

Standing up for our values and beliefs may at first feel risky, but it is likely that more people agree with us than we think. By doing the right thing, we are showing courage and leadership. Ultimately, we all have a role in eliminating violence/abuse; to do so we must choose not to support abusive or disrespectful behaviors.

There is no one, right way to take an active role in setting a respectful tone or intervening when abusive comments or behaviors are happening.

Below are some good examples of ways to be a courageous bystander.

- **Don't laugh** at inappropriate or sexist jokes, or jokes that are at someone's expense. Go even further to explain why a joke is sexist and might be offensive to others, and ask the teller to refrain from telling such jokes.
- **Use respectful language in conversations.** Challenge others when they use disrespectful language.
- **Use nonviolent means of expressing your disapproval** when others behave in disrespectful or abusive ways, for example, the "silent stare" can be very powerful or talking with the abuser about their behavior can be a powerful eye opener. Using violence to get your message across may reinforce to the abuser that violence is an acceptable way to get what you want.
- **If physical violence is occurring, call 911 for assistance.**
- **Intervene as a group.** There is power in numbers, and if many people try to intervene on behalf of the victim, the abuser will typically leave the situation.
- **Being a good listener and friend** to someone who is being abused or disrespected is a great first step. It can be powerful for the victim if you express your concerns, provide information to help them understand what abuse, and disrespect look like and assist them in utilizing helpful resources.
- **If you stand up to abuse you will role-model healthy and respectful behavior** and show people that they are worthy of being treated with respect. You will also show people behaving disrespectfully or abusively that their behavior is socially unpopular, uncool, and unacceptable.
- Let authority figures, organizations, and companies know how you feel as a consumer, concerned citizen, or member of that organization or group. Boycott their products, write letters or emails, help change organizational policies or practices, host a peaceful

protest or rally, and organize others to use nonviolent solutions to get involved and have a voice.

<http://www.safeandrespectful.org/>

### ***“Courageous Bystander” Scenarios***

You are shopping at the mall and see a new T-shirt store that is selling shirts with pictures and slogans that promote violence and harmful stereotypes.

- How do you feel when you see this?
- What do you think about it?
- How can you be part of “the solution”?

During morning announcements, the coach of your school’s football team commented on how the team “played like a bunch of girls” at last weekend’s game.

- How do you feel when you hear this?
- What do you think about it?
- How can you be part of “the solution”?

You are sitting in the cafeteria at lunch when a girl walks by your table. One of your friends yells to her, “Hey, Baby! You look hot!” She looks kind of startled and quickly walks away.

- How do you feel when you see/hear this?
- What do you think about it?
- How can you be part of “the solution”?

Lately you have noticed that your friend, Mark, embarrasses his girlfriend whenever you are around. He will make fun of her, purposely ignore her, or threaten to break up with her if he is not getting his way. She usually ends up in tears, and he laughs about it.

- How do you feel when your friend acts this way?
- What do you think about it?
- How can you be part of “the solution”?

You and your friend are hanging out for a few hours, and you notice that he or she calls her boyfriend’s house over and over “to make sure he is there.”

- How do you feel when your friend acts this way?
- What do you think about it?
- How can you be part of “the solution”?

You overhear a boy in your class talking about how his mom is in the hospital and he seems upset. Another student says to him “Man, that’s messed up, but don’t go crying like a girl.”

- How do you feel when your friend acts this way?
- What do you think about it?
- How can you be part of “the solution”?

## ***How Can I Be Part of the Solution?***

### **Sample Strategies**

1. **"I" Statements**

- Three parts:

I feel \_\_\_\_\_ (state your feelings)

when \_\_\_\_\_ (name the behavior).

I want \_\_\_\_\_ (what you want that person to do).

- Example: I feel uncomfortable when you stare at my body when we are talking. I want you to look me in the face from now on.

2. **Humor**

- Speak up with humor. It may help cut down the tension of getting involved.
- If you are witty, this may fit your style.
- Caution: Be careful not to be so humorous that you end up mocking or making light of your own feelings or reaction. Funny does not mean unimportant.

3. **Group Intervention**

- Approach the person as a group with other people (friends, teachers, parents) that share your values and beliefs. Think about healthy, nonviolent ways that you can let the other person know that he/she is acting disrespectfully. There is strength in numbers!
- Best used with someone who has a clear pattern of behavior so the group can use examples of how this person has behaved like this in the past.

4. **"Bring It Home"**

- Say something so the person acting out realizes what it would be like to be in **another person's shoes.**
- Examples: **"I hope no one ever talks about you like that."** **"What if someone said your girlfriend needed to be smacked around or called your Mom that name?"**

5. **"We're Friends, Right..."**

- Make your point but do so in a caring, noncritical way.
- Example: **"As your friend, I've gotta tell you that your ringtone calling girls all sorts of nasty names is not so popular with the ladies. Why don't you do yourself a favor and change it up?"**

6. **Distraction**

- **Say something that helps snap someone out of their "disrespectful comfort zone,"** like asking a person who is harassing or making fun of someone else a question to get them off-track.
- **Example: "Hey—did we have homework for this class?"**

7. **Silent Stare**

- Just looking at someone in a disapproving way when they are doing or saying something that you do not agree with or makes you feel uncomfortable can sometimes even be more powerful than words.

8. Media Boycott

- There are many ways to use your consumer power:
  - ♦ Do not buy the product.
  - ♦ Encourage friends/family not to buy the product (i.e., send out emails with information on why the product is harmful or post similar messages on social networking sites).
  - ♦ Write a letter or send an email to the company manufacturing and/or selling the product explaining to them how they are using your business by promoting harmful messages.

9. Influence Authority Figures

- There are many ways to take your concerns to people in charge:
  - ♦ Within school, talk to your teachers, coaches, administrators, and/or principal about the issue and how you would like to see the school handle it.
  - ♦ Write a letter to the editor of your school or community newspaper about your feelings on the issue.
  - ♦ Volunteer to become involved in developing policies, guidelines, or laws that address the issue.
  - ♦ Poll your classmates about their feelings on this issue and organize them to take



## HEALTHY RELATIONSHIPS ~ Post Survey

TO HELP US MATCH TO YOUR SURVEYS WITHOUT KNOWING WHO YOU ARE, PLEASE USE YOUR SURVEY ID.  
 Please write the month and the date you were born (don't put the year). Then write the first 3 letters of your mother's first name.

EXAMPLE: If you were born on July 5<sup>th</sup> and your mother's name is Mary, your ID would be:

PLEASE WRITE YOUR ID HERE

J	U	L	0	5	M	A	R
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Thank you for taking the time to complete this short survey. We are interested in what you think when it comes to healthy relationships. Please be sure to answer all of the questions in all sections. Your answers will be kept confidential. When you finish, please return the survey to your teacher.

Would you consider the following behaviors respectful?	Definitely Not Respectful	Not Respectful	Neutral	Respectful	Definitely Respectful
23. Picking on someone as long as they are not physically hurt.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Your boyfriend/girlfriend threatens to do something hurtful if you broke up with him/her.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Calling your boyfriend/girlfriend names during an argument.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Your boyfriend/girlfriend wants you to spend all of your time with him/her.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Your boyfriend/girlfriend values your opinion even when you disagree.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Telling a guy that he's "acting like a girl" to put him down.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Your boyfriend/girlfriend shares embarrassing or private photos/videos of you.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Asking your friends to watch your boyfriend/girlfriend if you don't trust him/her.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Your boyfriend/girlfriend pressures you to do something you don't want to do.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Rating a girl's looks on a scale of 1-10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Your boyfriend/girlfriend always checks on your whereabouts and activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MOST of the time, what do you think about these statements?	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
34. Both partners should have equal say in their relationship.	<input type="checkbox"/>				
35. Standing up for what I believe is important to me even if others don't agree.	<input type="checkbox"/>				
36. Television shows, movies, and song lyrics can have an effect on how you think or act.	<input type="checkbox"/>				
37. People who act aggressively deserve respect.	<input type="checkbox"/>				
38. It is better if girls do typical "girly" stuff and guys do typical "manly" stuff.	<input type="checkbox"/>				

Continue to the next page



<b>MOST</b> of the time, what do you think about these statements?	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
39. As long as I don't act violently in a relationship, I am promoting safe and respectful relationships.	<input type="checkbox"/>				
40. If safe to do so, people should stand up for someone being insulted.	<input type="checkbox"/>				
41. There are things I can do to help prevent violence in my community/society.	<input type="checkbox"/>				
42. Advertising is mainly used for brand or product recognition and does not contain deeper meaning or messages.	<input type="checkbox"/>				
43. My choice of communication style can have an effect on how I make others feel.	<input type="checkbox"/>				
44. Personal boundaries can only be violated by strangers or acquaintances so it isn't necessary to have clear boundaries with good friends or my boyfriend/girlfriend.	<input type="checkbox"/>				

Please tell us how much you liked or disliked the different parts of the class.	Disliked A Lot	Disliked	Neutral	Liked	Liked A Lot
Using video clips/song clips or other media	<input type="checkbox"/>				
Ideas/concepts about healthy vs. unhealthy relationships	<input type="checkbox"/>				
Group/team work	<input type="checkbox"/>				
Ideas/concepts about gender stereotyping	<input type="checkbox"/>				
Role playing	<input type="checkbox"/>				
Class discussion	<input type="checkbox"/>				
Ideas/concepts presented about media	<input type="checkbox"/>				
Healthy Relationships final project	<input type="checkbox"/>				
Ideas/concepts about communication styles and boundaries	<input type="checkbox"/>				

	None	A Little	A Lot
How much of the information from this class do you find useful for your current or future relationships?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NAME (TEACHER):

SCHOOL:

			<u>COMMENTS</u>
<b>SESSION</b> <i>(e.g., class or period)</i>	<u><b>Start Date</b></u>	<u><b>End Date</b></u>	
<b># of STUDENTS ENROLLED</b>			
<b># of STUDENTS COMPLETED</b>			
<b>Were all five lessons taught?</b>			
<b>If no, which lessons were not taught:</b>			

**Please return this form along with all completed pre and post surveys**  
**to:**  
**DELTA COORDINATOR**  
**Child, Inc.**  
**ADDRESS HERE**

**Questions or concerns may be e-mailed to: [safeandrespectful@gmail.com](mailto:safeandrespectful@gmail.com)**

***K-U-Ds for Healthy Relationships Unit:  
Personal Health and Wellness, Grades 9-12***

<b>Key Learning and Unit Essential Questions</b>
<p><b>Key Learning:</b> Decisions and choices that we make about our behaviors directly influence our health and the health of others.</p>
<p><b>Unit Essential Questions:</b></p> <ul style="list-style-type: none"> <li>• How do I recognize and practice healthy relationships?</li> <li>• How do my decisions and choices influence my relationships and those of others?</li> </ul>
<b>Standards/GLEs/PLEs Addressed in the Unit</b>
<ul style="list-style-type: none"> <li>• Students will understand essential health concepts in order to transfer knowledge into healthy actions for life. Specific core concepts to be addressed: personal health and wellness, family life and sexuality, mental health, injury prevention and safety.             <ul style="list-style-type: none"> <li>▪ 1.1 Predict how healthy behaviors impact health status</li> <li>▪ 1.2 Analyze the interrelationship of intellectual, emotional, social, and physical health</li> </ul> </li> <li>• Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.             <ul style="list-style-type: none"> <li>▪ 2.2 Analyze how culture supports and challenges health beliefs and practices</li> <li>▪ 2.3 Consider how peers influence healthy and unhealthy behaviors</li> <li>▪ 2.4 Evaluate the effect of media on personal and family health</li> </ul> </li> <li>• Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks             <ul style="list-style-type: none"> <li>▪ 4.3 Create strategies to prevent, manage, or resolve interpersonal conflicts without harming self or others</li> <li>▪ 4.4 Demonstrate how to ask for and offer assistance to enhance the health of self and others</li> </ul> </li> <li>• Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.             <ul style="list-style-type: none"> <li>▪ 7.1 Exhibit individual responsibility for enhancing personal health</li> <li>▪ 7.3 Advocate for practices to avoid or reduce health risks to self and others</li> </ul> </li> <li>• Students will demonstrate the ability to advocate for personal, family, and community health.             <ul style="list-style-type: none"> <li>▪ 8.1 Design accurate peer and societal norms to formulate a health-enhancing message</li> <li>▪ 8.2 Invent ways to influence and support others in making positive health choices</li> </ul> </li> </ul>

<b>KNOW</b>	<b>UNDERSTAND</b>	<b>DO</b>
<ul style="list-style-type: none"> <li>• Respectful vs. disrespectful behaviors</li> <li>• Communication styles and types</li> <li>• Gender stereotypes</li> <li>• Behaviors based on power and based on equality</li> <li>• The benefits of setting and respecting others' boundaries and limits</li> <li>• The influences of media, peer pressure on teen relationships</li> <li>• Qualities of healthy relationships</li> <li>• Clear and unclear boundaries</li> <li>• Consequences of not setting boundaries</li> <li>• Cycle of Abuse</li> <li>• Sex vs. gender</li> </ul>	<ul style="list-style-type: none"> <li>• Respect for ourselves and others is a personal responsibility</li> <li>• The benefits of setting and respecting others boundaries</li> <li>• A cycle of abuse</li> <li>• The relationship between disrespect and violence</li> <li>• Decisions and choices that we make about our behaviors directly influence our health and the health of others</li> <li>• We must choose not to support abusive or disrespectful behaviors.</li> <li>• Everyone can make a difference</li> </ul>	<ul style="list-style-type: none"> <li>• Recognize how gender stereotypes are limiting and/or disrespectful</li> <li>• Demonstrate effective media message deciphering tactics and strategies</li> <li>• Critically analyze media messages</li> <li>• Set and respect boundaries for self and others</li> <li>• Choose how to be treated and how to treat others</li> <li>• Identify resources to help with abusive relationships</li> <li>• Practice how to communicate and set boundaries for a healthy relationship</li> <li>• Resist and challenge unhealthy cultural norms</li> <li>• Work cooperatively when advocating for healthy individuals, families, and schools</li> <li>• Practice how to communicate and set boundaries for a healthy relationship</li> </ul>

**Student Learning Map for Healthy Relationships Unit:  
Personal Health and Wellness, Grades 9-12**

<b>Key Learning and Unit Essential Questions</b>
<p><b>Key Learning:</b> Decisions and choices that we make about our behaviors directly influence our health and the health of others.</p>
<p><b>Unit Essential Questions:</b></p> <ul style="list-style-type: none"> <li>• How do I recognize and practice healthy relationships?</li> <li>• How do my decisions and choices influence my relationships and those of others?</li> </ul>

<p><b>Concept:</b> Communication and Boundaries</p>	<p><b>Concept:</b> Gender roles and the Media</p>	<p><b>Concept:</b> Interpersonal Abuse vs. Equality</p>	<p><b>Concept:</b> Respect</p>	<p><b>Concept:</b> Courageous Bystander</p>
<p><b>Lesson Essential Questions:</b></p> <ul style="list-style-type: none"> <li>• How do we communicate effectively with each other?</li> <li>• How does a feeling of self-worth help us set and maintain our boundaries?</li> </ul>	<p><b>Lesson Essential Questions:</b></p> <ul style="list-style-type: none"> <li>• How does gender stereotyping affect relationships?</li> <li>• Can I deconstruct media messages?</li> </ul>	<p><b>Lesson Essential Question:</b></p> <ul style="list-style-type: none"> <li>• How can I recognize a cycle of abuse?</li> </ul>	<p><b>Lesson Essential Questions:</b></p> <ul style="list-style-type: none"> <li>• What is respect?</li> <li>• How does my respectful and disrespectful behavior influence the behavior of others towards me and other people?</li> </ul>	<p><b>Lesson Essential Questions:</b></p> <ul style="list-style-type: none"> <li>• How can I make a difference by being a courageous bystander?</li> <li>• How can I be part of the solution?</li> </ul>
<p><b>Vocabulary:</b> boundaries communication communication styles</p>	<p><b>Vocabulary:</b> Gender Gender stereotype Biological sex Media literacy Objectification Desensitization Deconstruction Discrimination</p>	<p><b>Vocabulary:</b> Interpersonal abuse equality relationship equal power (relationship)</p>	<p><b>Vocabulary:</b> Respect/ disrespect power equality interpersonal abuse</p>	<p><b>Vocabulary:</b> Courageous bystander consequences personal power advocacy</p>

Model from Learning-Focused Strategies. Thompson, M., Thompson, J. (2008)

## ***Healthy Relationships Word Wall Words***

Deconstruction – the process of examining the meaning behind a media message.

Stereotype – a characterization based on conscious or unconscious assumptions that one aspect (gender, age, ethnic or national identity, religion, occupation, marital status, etc.) is predictably accompanied by certain character traits, actions, even values.

Gender – being masculine or feminine.

Biological sex – male or female at birth.

Media literacy – the ability to read, understand, and deconstruct media images and messages.

Boundary – the limits people draw with other people; describe the way people allow themselves to be treated.

Relationship – a bond or connection between two people.

Respect – words or actions that acknowledge feelings, choices, and rights of an individual; there is self-respect and respect for others.

Courageous bystander – one who takes an active role in promoting a respectful environment by safely and responsibly interfering with behaviors, statements, or attitudes that promote or condone abuse or disrespect.

Interpersonal abuse – a way to get or maintain control in a relationship, a misuse of power.

Equality – the idea of treating all people, regardless of age, race, gender, sexual orientation, ability, religion, ethnicity, class, etc., with the same value and respect.

## ***Delaware Model Unit Gallery Template: Health Education***

This unit has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model unit has undergone a rigorous peer review and jurying process to ensure alignment to selected Delaware Content Standards.

**Unit Title: Healthy Eating for Life**

**Designed by: Elaine van Wickle**

**District: Christina**

**Grade Cluster: 9–12**

**Time Frame: 3 Lessons over 5 Classes**

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### **Summary of Unit**

Students will learn to assess the nutritional value of food and learn to plan a healthy diet for themselves and for someone with special dietary needs. This unit will provide a framework of knowledge that the student can use to choose a healthy diet that they can realistically follow. Students will examine the influences of unhealthy eating and eating disorders, habit, culture, media, and environment on food choices and define ways to encourage healthy eating and weight management for a lifetime.

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## **Charter School Unit Modification**

### **Guiding Questions**

1. Why was this model unit of instruction selected as part of your schools' curricular submission?

This unit is posted on the DDOE web site as an exemplary unit of instruction for health. It teaches fundamental information and strategies for eating and staying healthy.

2. What modifications have been made to the model unit of instruction to meet the specific needs of the student population your school serves?

No modifications will need to be made based on the student population.

3. What modifications have been made to the model unit of instruction that reflect the resources (human, time, building, technology etc.) available to your school?

No modifications will need to be made based on the resources available. The high school will have classroom and, if needed, a gym or multi-purpose room available for healthy activities.

4. Describe any other modifications that have been made to the model unit of instruction that will assist in the curricular review for your school.

No other modification will need to be made to the unit.

## Stage 1 – Desired Results

(What students will know, be able to do and understand)

### Delaware Health Education Standards

- 1. Students will understand essential health concepts in order to transfer knowledge into actions for life. Specify core concepts to be addressed:  
Nutrition
- 2. Students will analyze the influence of family, peers, culture media, technology and other factors on health behavior.\*
- 3. Students will demonstrate the ability to access information, products and services to enhance health.\*
- 4. Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
- 5. Students will demonstrate the ability to use decision-making skills to enhance health.
- 6. Students will demonstrate the ability to use goal-setting skills to enhance health.
- 7. Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
- 8. Students will demonstrate the ability to advocate for personal, family and community health.  
\* Includes technology integration

### Big Idea: Health Is Personal Power

#### Unit Enduring Understandings

- Full-sentence, important statements or generalizations that specify what students should understand from the Big Ideas(s) and/or Content Standards and that are transferable to new situations.
- Health enhances life.
- Personal actions impact self and others.
- There are barriers that can hinder healthy decision-making.
- Several factors influence the formation, achievement, and evaluation of a long-term personal health plan.

#### Essential Questions

##### *What is Health?*

##### *What prevents people from practicing healthy behavior?*

#### Unit Essential Questions(s)

- Open-ended questions designed to guide student inquiry and learning.
- What is healthy eating? Does it matter?
- How can a healthy diet for one person be unhealthy for another?
- What prevents people from healthy eating?

## Knowledge and Skills

- Needed to meet Content Standards addressed in Stage 3 and assessed in Stage 2.

### Students will know...

- The nutritional value of a wide variety of foods.
- The effects of environment, habit, culture, and media on food choices.

### Students will be able to...

- Use a framework of knowledge to create a healthy eating plan for themselves and another person.
- Define ways to encourage healthy eating and weight management for a lifetime.
- Examine current eating choices.
- Explore healthy eating options.
- Present and share information with classmates.
- Maintain a reflective journal.

## Stage 2 – Assessment Evidence

(Evidence that will be collected to determine whether or not Desired Results are achieved)

### Suggested Unit Transfer Task(s)

An effective transfer task for ALL students should be designed to include:

- Complex, real-world, authentic applications
- Demonstration of high-level thinking with one or more facets of understanding (e.g., explain, interpret, apply, empathize, have perspective, self-knowledge)

Your task is to create a practical eating plan for you and one other person in your family. NOTE: The other person has a dietary problem such as diabetes, over or underweight, food allergies, or is an athlete. The plan must allow for future changes. Provide a written explanation for each plan justifying why each plan will improve or maintain the health of the person. Compare the new plan with former eating habits.

### Rubric(s)

- Scoring guide to evaluate transfer tasks used as evidence of student proficiency.

An effective scoring guide should:

- Measure what is appropriate for the Content Standard that is assessed.
  - Provide opportunities for differentiation of the transfer tasks used as evidence of student proficiency.
4. Student is able to design an insightful mature plan that meets USDA guidelines and shows an understanding of nutritional value and taste appeal. **Student's plan** demonstrates a complete and thorough understanding of personal dietary needs and cites strategies for supporting a healthy diet. The plan allows for change in the future and gives specific examples of realistic strategies for dealing with change.
  3. Student is able to create an insightful plan based on the USDA guidelines and shows a relevant understanding of nutritional values and taste appeal. **Student's plan** demonstrates a reasonable understanding of personal dietary needs and cites adequate

strategies for supporting a healthy diet. This plan allows for some change in the future and gives solid examples of strategies for dealing with change.

2. Student work shows a limited understanding of personal dietary needs and cites few supporting strategies for a healthy diet. Student plan seems somewhat effective and shows partial understanding of strategies for change.
1. Student work shows no understanding of personal dietary needs. Student plan lacks clarity and is difficult to follow. Work is not supported with the USDA Guidelines and shows little or no strategies for change.

### Other Evidence

- Performance Assessment(s) for student understanding of the Stage 1 elements (Enduring Understandings, Essential Questions, Big Ideas) found in the Content Standards
- Varied evidence that checks for understanding (e.g., tests, quizzes, prompts, student work samples, observations)
- Webquest
- Fast food findings
- Interpretation of nutrition on food labels
- Shopping list

### Student Self-Assessment and Reflection

- Opportunities for self-monitoring learning (e.g., reflection journals, learning logs, pre- and post-tests, self-editing—based on ongoing formative assessments)
- Food survey
- Reflective journal

## Stage 3 – Learning Plan

(Learning activities need to align with Stage 1 and Stage 2 and show connections to prior learning)

### Key Learning Events Needed to Achieve Unit Goals

- Scaffold in order to acquire information, construct meaning, and practice transfer of understanding
- Provide ongoing opportunities for self-monitoring and self-evaluation

Lesson plans may be attached to Stage 3 and must include relevant citations and follow U.S. copyright laws <http://www.umuc.edu/library/copy.shtml>.

**Lesson 1:** Why do we eat what we eat?



Lesson One

**Lesson 2:** Super Size Me!



Lesson Two

**Lesson 3:** Putting It All Together



Lesson Three

## Resources and Teaching Tips

### Resources

- Include a variety of resources (texts, print, media, and web links) that best supports the unit.
- HealthTeacher.com
- Kidshealth.org
- Fast food comparisons from local restaurants
- <http://www.nbc4.com/diabetes/6863251/detail.html>
- <http://diabetic-diet-secrets.com/members/home.html>
- Pathmark.com
- Webquests

### Teaching Tips

- Provide tips to help teachers identify and correct student misunderstandings and weaknesses.

Serving sizes are difficult for students to grasp.

### Accommodations/Differentiation

- Stage 2 and 3 allow students to demonstrate understanding with choices, options, and/or variety in the products and performances without compromising the expectations of the Content Standards.
- Describe how instruction may be varied to address differences in readiness, interest, and/or learning profiles.

Consider analysis of recipes for more advanced students.

## Design Principles for Unit Development

Please check the design principles below that are embedded within the unit.

- International Education** - the ability to appreciate the richness of our own cultural heritage and that of other cultures and to provide cross-cultural communicative competence.
- Universal Design for Learning** - the ability to provide multiple means of representation, expression and engagement to give learners various ways to acquire and demonstrate knowledge.
- 21<sup>st</sup> Century Learning** – the ability of to use skills, resources, and tools to meet the **demands of the global community and tomorrow’s workplace.** (1) Inquire, think critically, and gain knowledge, (2) Draw conclusions make informed decisions, apply knowledge to new situations, and create new knowledge, (3) Share knowledge and participate ethically and productively as members of our democratic society, (4) Pursue personal and aesthetic growth. (AASL, 2007)

(Briefly explain how design principle(s) are embedded within the unit design.)

Food choices are often based on cultural learning and habit. In this unit, students are encouraged to examine their own food choices and the choices made by other family members. This will help them to determine how they can continue to enjoy foods unique to their families and retain a healthy diet.

### **Connections to Other Areas**

**Suggestions for integrating instruction with other curricular areas, school support services (health services, counseling, nutrition services, and school climate) families and communities.**

Students with dietary issues and/or health problems related to weight management may be referred to Wellness Centers, Counselors, or School Nurses for support or further referral for these issues.

## ***Delaware Model Unit Gallery Template: Health Education***

This unit has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model unit has undergone a rigorous peer review and jurying process to ensure alignment to selected Delaware Content Standards.

**Unit Title: Fact or Fiction: Alcohol & Tobacco**

**Designed by: Michael Connors**  
**District: Cape Henlopen**

**Grade Cluster: 9–12**  
**Time Frame: 3 Lessons**

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### **Summary of Unit**

Students will learn the skill of examining the effects of alcohol and tobacco use on the body. Students will study and assess appropriate prevention, intervention, and treatment resources in relation to individual, family, school, and community needs. Students will become familiar with strategies used to promote alcohol and tobacco use. This unit on alcohol and tobacco addiction combines understanding of health knowledge that is essential to learning with the application of that knowledge through skill development in order to be effective.

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## **Charter School Unit Modification**

### **Guiding Questions**

1. Why was this model unit of **instruction selected as part of your schools' curricular submission?**

This unit is posted on the DDOE web site as an exemplary unit of instruction for health. It teaches fundamental information and strategies for staying healthy.

2. What modifications have been made to the model unit of instruction to meet the specific needs of the student population your school serves?

No modifications will need to be made based on the student population.

3. What modifications have been made to the model unit of instruction that reflect the resources (human, time, building, technology etc.) available to your school?

No modifications will need to be made based on the resources available. The high school will have classroom and, if needed, a gym or multi-purpose room available for healthy activities.

4. Describe any other modifications that have been made to the model unit of instruction that will assist in the curricular review for your school.

No other modification will need to be made to the unit.

## **Stage 1 – Desired Results** (What students will know, be able to do and understand)

### **Delaware Health Education Standards**

- 1. Students will understand essential health concepts in order to transfer knowledge into actions for life. Specify core concepts to be addressed:  
Alcohol, tobacco, and other drugs
- 2. Students will analyze the influence of family, peers, culture media, technology and other factors on health behavior.\*
- 3. Students will demonstrate the ability to access information, products and services to enhance health.\*
- 4. Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
- 5. Students will demonstrate the ability to use decision-making skills to enhance health.
- 6. Students will demonstrate the ability to use goal-setting skills to enhance health.
- 7. Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
- 8. Students will demonstrate the ability to advocate for personal, family and community health.  
\* Includes technology integration

### **Big Idea: Health is Personal Power**

#### **Unit Enduring Understanding**

- Full-sentence, important statements or generalizations that specify what students should understand from the Big Ideas and/or Content Standards and that are transferable to new situations.
- Avoiding alcohol and tobacco is achieved through the understanding and application of resistance skills.

#### **Essential Questions**

##### ***What is Health?***

##### ***What prevents people from practicing healthy behavior?***

#### **Unit Essential Questions(s)**

- Open-ended questions designed to guide student inquiry and learning.
- How do personal goals, knowledge and values influence alcohol & tobacco use?

## Knowledge and Skills

- Needed to meet Content Standards addressed in Stage 3 and assessed in Stage 2.

### Students will know...

- Using alcohol or tobacco will have consequences for themselves and others.
- The legal consequences of alcohol and tobacco use.

### Students will be able to...

- Demonstrate resistance, refusal, negotiation, and collaboration skills and conflict resolution strategies to enhance health.
- Locate and utilize resources from home, school, and community that provide valid information concerning alcohol and tobacco use.
- Access local cessation programs.

## Stage 2 – Assessment Evidence

(Evidence that will be collected to determine whether or not Desired Results are achieved)

### Suggested Unit Transfer Task(s)

An effective transfer task for ALL students should be designed to include:

- Complex, real-world, authentic applications
- Demonstration of high-level thinking with one or more facets of understanding (e.g., explain, interpret, apply, empathize, have perspective, self-knowledge)

**Your school's community offers alcohol, tobacco, and other drug education programs.** In order for these programs to be sustained and successful, they require support from policy makers. You have chosen to be an advocate, leading the efforts against the use of underage alcohol use and drug abuse by developing a presentation to persuade policy makers to sustain and support this program.

You must develop a PowerPoint presentation that will identify the programs that currently exist and identify needs for continued success. Your presentation will need to include strategies for community planning efforts. In addition, the presentation should include the benefits of alcohol and tobacco awareness programs that will promote positive alternatives to drug use for local community members.

### Rubric(s)

Scoring guide to evaluate transfer tasks used as evidence of student proficiency

An effective scoring guide should:

- Measure what is appropriate for the Content Standard that is assessed.
  - Provide opportunities for differentiation of the transfer tasks used as evidence of student proficiency.
4. **Student's** PowerPoint presentation demonstrates an in-depth understanding of the programs that currently exist and what is **needed for support**. **Student's work grasps** the benefits of alcohol and tobacco awareness programs that will promote positive alternatives. This presentation identifies benefits and notes specific strategies that may impact community-planning efforts.

3. **Student's** PowerPoint presentation demonstrates a relevant understanding of existing programs and what is needed for support. **Student's work demonstrates reasonable** understanding of the benefits of an alcohol and tobacco awareness program that will promote positive alternatives. The PowerPoint allows for some change in the future and notes strategies that may impact community-planning efforts.
2. **Student's** PowerPoint presentation shows limited understanding of existing programs or continued support needs. Few strategies are cited that could impact community-planning efforts. **Student's presentation is somewhat effective and shows partial** understanding of the benefits of an alcohol and tobacco awareness program that will promote positive alternatives.
1. **Student's** PowerPoint presentation shows little or no understanding of programs that currently exist nor what is needed for continued support. The presentation lacks clarity **and is difficult to follow. Student's work shows lack of understanding of the strategies** that may impact community-planning efforts.

### Other Evidence

- Performance assessment(s) for student understanding of the Stage 1 elements (Enduring Understandings, Essential Questions, Big Ideas) found in the Content Standards.
  - Varied evidence that checks for understanding (e.g., tests, quizzes, prompts, student work samples, observations).
- True/false questionnaire to uncover prior knowledge of alcohol, tobacco, and other drugs
  - Student Resource Activator Sheet (Lesson 1/Appendix A)
  - Student chart of Alcohol and Tobacco Facts (Lesson 1/Appendix B)
  - Consequences of Tobacco Use Scenarios (Lesson 1/Appendix C)
  
  - Analyzing an Alcohol Ad Worksheet (Lesson 2/Appendix E)
  - Impact of Tobacco Addiction Student Resource Activator Sheet (Lesson 3/Appendix F)
  - Student Resource Reading and Processing Sheet (Lesson 3/Appendix G)

### Student Self-Assessment and Reflection

- Opportunities for self-monitoring learning (e.g., reflection journals, learning logs, pre- and post-tests, self-editing—based on ongoing formative assessments)

Ask students to respond to one of the following questions in their journal:

1. Why have I chosen to smoke or not to smoke?
2. How would a tobacco related illness affect my future goals?

In addition, the final assignment (Lesson 3) will ask students to choose a scenario from three options to explore how they would respond.

## Stage 3 – Learning Plan

(Learning activities need to align with Stage 1 and Stage 2 and show connections to prior learning)

### Key Learning Events Needed to Achieve Unit Goals

- Scaffold in order to acquire information, construct meaning, and practice transfer of understanding.
- Provide ongoing opportunities for self-monitoring and self-evaluation.

Lesson plans may be attached to Stage 3 and must include relevant citations and follow U.S. copyright laws.  
<http://www.umuc.edu/library/copy.shtml>

Lesson One: Butt Out Smoking!

Lesson Two: **Lights...Camera...Alcohol!**

Lesson Three: **Tobacco Addiction...It's Not a Game!**



Lesson One



Lesson Two



Lesson Three

## Resources and Teaching Tips

### Resources

- Include a variety of resources (texts, print, media, and web links) that best supports the unit.
- Decisions for Health. Holt, Rinehart, and Winston, 2007
- Teen Health. The McGraw Hill Companies, Inc. 2007
- Glencoe Health. The McGraw Hill Companies, Inc. 2007
- [www.lunginfo.org](http://www.lunginfo.org)
- [www.healthteacher.com](http://www.healthteacher.com)
- [www.cdc.gov](http://www.cdc.gov)
- [www.cdc.gov/tobacco/basic\\_information/FastFacts.htm](http://www.cdc.gov/tobacco/basic_information/FastFacts.htm)
- [www.projectalert.best.org](http://www.projectalert.best.org)

### Teaching Tips

- Provide tips to help teachers identify and correct student misunderstandings and weaknesses.

Students may have difficulty with this unit if family members are involved with alcohol, tobacco, and other drug (ATOD) use/abuse. Students may become defensive or emotional as they learn about the physical and social consequences of ATOD.

### Accommodations/Differentiation

- Stage 2 and 3 allow students to demonstrate understanding with choices, options, and/or variety in the products and performances without compromising the expectations of the Content Standards.
- Describe how instruction may be varied to address differences in readiness, interest, and/or learning profiles.
- Students with limited cognition or dexterity may demonstrate their understanding using a different method from power point presentation with teacher approval and support.
- Peer helpers and coaches or teaming are additional means to achieve the expectations of this unit.

## Design Principles for Unit Development

Please check the design principles below that are embedded within the unit.

- International Education** - the ability to appreciate the richness of our own cultural heritage and that of other cultures and to provide cross-cultural communicative competence.
- Universal Design for Learning** - the ability to provide multiple means of representation, expression, and engagement to give learners various ways to acquire and demonstrate knowledge.
- 21<sup>st</sup> Century Learning** – the ability of to use skills, resources, and tools to meet the **demands of the global community and tomorrow’s workplace.** (1) Inquire, think critically, and gain knowledge, (2) Draw conclusions make informed decisions, apply knowledge to new situations, and create new knowledge, (3) Share knowledge and participate ethically and productively as members of our democratic society, (4) Pursue personal and aesthetic growth. (AASL,2007)

(Briefly explain how design principle(s) are embedded within the unit design.)

21<sup>st</sup> Century learning skills are used extensively throughout this unit as students learn about the consequences of ATOD use/abuse. Their skills to draw conclusions, apply knowledge, and support the community-at-large are strengthened and encouraged. Using advocacy skills, students will share and practice presentation and computer skills. Their growth will be enhanced by the meshing of knowledge and skills and the expression of ethical behavior intentions.

### **Connections to Other Areas**

Suggestions for integrating instruction with other curricular areas, school support services (health services, counseling, nutrition services, and school climate) families and communities.

An ATOD unit often helps students identify personal and family issues that require referral to school counselors, nurses, or wellness centers and on to community providers depending on each case. School support services are valuable assets to the health education teacher.

The Delaware Chapter of the American Lung Association provides many resources to help schools. For more information about programs and services, call (302) 655-7258.