Delaware Science Coalition Memorandum of Agreement

The The Delaware Met High School (proposed opening – Fall 2014) agrees to abide by
(LEA Name)

the Delaware Science Coalition's bylaws and join the Delaware Science Coalition partnership. The Delaware Science Coalition program is sustained by local district/charter school fees in combination with state allocations. Professional development; materials acquisitions; distribution, collection and refurbishment of science curricular units; and any other associated costs are supported by these funding sources. The Coalition's bylaws and fee schedule for school year 2012-2013 are attached to this Memorandum of Agreement.

Signed:

Marian Wolak, Director **Curriculum, Instruction & Professional Development**	**Date**
Linda Rogers, Associate Secretary **Teaching & Learning Branch**	**Date**
Karen Field Rogers, Associate Secretary **Financial Reform & Resource Management**	**Date**
Mark Murphy, Secretary **Delaware Department of Education**	**Date**
LEA Official, Title	12/5/12 **Date**

Nash Childs, Board Chair 1300 North Grant Avenue #110 Wilmington, DE 19806 (302) 655-3434

November 19, 2012

Ms. Tonyea Mead
Education Associate for Science
Delaware Department of Education
John G. Townsend Building
401 Federal Street, Suite 2
Dover, DE 19901

Dear Ms. Mead:

The Founding Board of The Delaware Met High School is submitting a charter school application to open a high school in the fall of 2014 in Wilmington, DE. It is the intention of the Founding Board that the school will join the Science Coalition when it opens. The teachers will use the Science Coalition developed curriculum for grades 9-12, attend training, and fully implement science instruction as guided by the Science Coalition and Delaware Science Standards.

Sincerely,

Nash Childs
Founding Board Chair

Curriculum Framework Science

School: The Delaware Met **Curricular Tool: DE Science Coalition** **Grade: 9** **Teacher: _____**

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
Unit One: Energy **Timeline : 10 weeks**			
Standard One **The Nature and Application of Sciences and Technology** **Strand One** **Understandings and Abilities of Scientific Inquiry** **Substrand A**. Scientists conduct investigations for a variety of reasons including to explore new phenomena, to replicate other's results, to test how well a theory predicts, to develop new products, and to compare theories. **Substrand B**. : Science is distinguished from other ways of knowing by the use of empirical observations, experimental evidence, logical arguments and healthy skepticism. **Substrand C** Theories in science are well-established explanations of natural phenomena that are supported by many confirmed observations and verified hypotheses. The application of theories allows people to make reasonable predictions. Theories may be amended to become more complete with the introduction of new evidence. **Substrand D**. Investigating most real-world problems requires building upon previous scientific findings and cooperation among individuals with knowledge and expertise from a variety of scientific fields. The results of scientific studies are considered valid when subjected to critical review where contradictions are resolved and the explanation is confirmed. **Substrand E.** In communicating and defending the results of scientific inquiry, arguments must be logical and demonstrate connections between natural phenomena, investigations, and the historical body of	**Big Ideas** **Systems, Order, and Organization:** Energy takes many forms. These forms are grouped as kinetic energy and potential energy. **Evidence, Models, and Explanation:** Diagrams and equations are used to explain energy storage and transfer. Investigations supply evidence for explanations. **Constancy, Change, and Measurement:** Changes are caused by the transfer of energy. These transfers can be measured. Forces are responsible for these transfers. The total amount of energy cannot change. **Form and Function:** Energy stored in resources must be transferred into more useful forms before it	**Essential Questions:** What makes a question scientific? What constitutes evidence? When do you know you have enough evidence? Why is it necessary to justify and communicate an explanation? How do science and technology influence each other? How have past scientific contributions influenced current scientific understanding of the world? What do we mean in science when we hay that we stand on the shoulders of giants? Why do things have energy? How can energy be transferred from one material to another? What happens to a material	**Suggested Formative Assessments:** Students develop a crash barrier that will stop a car in the shortest distance without injuring a passenger. Students demonstrate their understanding of how wave energy can be used by designing inventions that transfer or transform energy to perform practical tasks. Students create a learning map that shows their understanding of the relationships among the forms of energy and the transfer and transformation of energy. Student journals Exit questions Lab reports Journals

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
scientific knowledge. (American Association for the Advancement of Science, 2001) **Substrand F**. Knowledge and skill from sources other than science are essential to scientific inquiry. These include mathematics, reading, writing, and technology. **Strand Two** **Science, Technology and Society** **Substrand A**. The pursuit of science can generate the need for advanced technology. Advanced technology, in turn, can provide the opportunity to pursue new scientific knowledge. **Substrand B.** The social, economic, and political forces of a society have a significant influence on what science and technology programs are pursued, funded, and implemented. **Strand Three** **History and Context of Science** **Substrand A**. New disciplines of science emerge as older disciplines interface into an integrated study of the natural world. As the body of scientific knowledge grows, the boundaries between individual disciplines diminish. **Standard Three** **Energy and Its Effects** **Strand One** **Forms and Sources of Energy** **Substrand A**. Electromagnetic waves carry a single form of energy called electromagnetic (radiant) energy **Substrand 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 be helpful to us.	when energy is transferred to it? What happens to the energy in a system – where does this energy come from, how is it changed within the system, and where does it ultimately go? How does the flow of energy affect the materials in the system? What is a "responsible" use of energy? Are there alternative forms of energy that will serve our needs, or better ways of using traditional forms of energy?	Pre-learning concept checks **<u>Suggested Summative Assessments:</u>** Unit Summative Assessment is indicated to be in Pilot form. When the assessment is made available, it can be used for post summative assessment purposes.

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
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 **Substrand C.** Mechanical waves result from the organized vibrations of molecules in substances. Kinetic energy can be transferred very quickly over large distances by mechanical waves. **Substrand D**. Thermal (heat) energy is associated with the random kinetic energy of the molecules of a substance. **Substrand E**. Magnetic energy and electrical energy are different aspects of a single electromagnetic energy, which results from the motion of electrical charges. **Substrand F**. Chemical energy is derived from the making and breaking of chemical bonds. **Substrand G**. 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. **Strand Two** **Forces and Transfer of Energy** **Substrand** 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. **Substrand E**. 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). **Substrand F** Electric forces between charged objects are attractive or repulsive. The electric forces between electrons and protons are			

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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 **Substrand G.** Electromagnetic forces are responsible for the physical properties of materials (e.g., the boiling point of a liquid) and the mechanical properties of materials (e.g., surface tension). **Substrand I.** The nuclear forces that hold the nucleus of an atom together are much stronger than the repulsive electric forces acting between the protons that would make the nucleus fly apart, therefore, most atoms have stable nuclei. **Strand Three** **Energy Interacting with Materials; The Transformation and Conservation of Energy** **Substrand** A. 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. **Substrand 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. **Substrand C.** Waves (e.g., sound and seismic waves, waves in water, and electromagnetic waves) carry energy that can have important consequences when transferred to objects or substances. **Substrand D.** When waves interact with materials, the energy they transfer often leads to the formation of other forms of energy. These			

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interactions, which depend upon the nature of the material and the wavelength of the waves, can be used to create practical devices (e.g., sonar and ultra sound imaging, solar cells, remote control units, and communication devices). **Substrand E**. Through reflection and refraction, electromagnetic waves can be redirected to produce concentrated beams or images of their source. **Substrand F.** 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.			
Unit Two: Living By Chemistry-Alchemy **Timeline: 10 weeks**			
Standard One **The Nature and Application of Sciences and Technology** **Strand One** **Understandings and Abilities of Scientific Inquiry** **Substrand A**. Understand that: Scientists conduct investigations for a variety of reasons including to explore new phenomena, to replicate other's results, to test how well a theory predicts, to develop new products, and to compare theories. Be able to: Identify and form questions that generate a specific testable hypothesis that guide the design and breadth of the scientific investigation. **Substrand B.** Understand that: Science is distinguished from other ways of knowing by the use of empirical observations, experimental evidence, logical arguments and healthy skepticism. **Substrand C** Theories in science are well-established explanations of natural phenomena that are supported by many confirmed observations and verified hypotheses. The application of theories allows people to make reasonable predictions. Theories may be amended to become more complete with the introduction of new evidence.	**Big Ideas** Safety is paramount when dealing with chemicals in the laboratory. Matter can be characterized by its physical and chemical properties The language of chemistry is logical and necessary when sharing information relating to chemical activity or processes. The periodic table is a tool that is useful in understanding and/or predicting the behaviors and/or interactions of	**Essential Questions:** How does the structure of an atom determine its properties? How do multiple atoms combine to form larger compounds? How does the conservation of mass apply to the interaction of reactants and products in a chemical reaction? What is the common language used by chemists in communicating chemical information? **Learning Targets:**	**Suggested Formative Assessments:** Worksheets Student Journals Learning Logs Self Assessments Teacher made pre-unit assessment Vocabulary work Observation of student discussions Participation in oral discussions **Suggested Summative Assessments:**

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
Substrand D. Understand that: Investigating most real-world problems requires building upon previous scientific findings and cooperation among individuals with knowledge and expertise from a variety of scientific fields. The results of scientific studies are considered valid when subjected to critical review where contradictions are resolved and the explanation is confirmed. **Substrand F.** Understand that: Knowledge and skill from sources other than science are essential to scientific inquiry. These include mathematics, reading, writing, and technology. **Strand Two** **Science, Technology and Society** **Substrand A**. The pursuit of science can generate the need for advanced technology. Advanced technology, in turn, can provide the opportunity to pursue new scientific knowledge. **Substrand B**. The social, economic, and political forces of a society have a significant influence on what science and technology programs are pursued, funded, and implemented. **Strand Three** **History and Context of Science** **Substrand A.** New disciplines of science emerge as older disciplines interface into an integrated study of the natural world. As the body of scientific knowledge grows, the boundaries between individual disciplines diminish. **Standard Two** **Materials and Their Properties** **Strand One** **Properties and Structures of Materials** **Substrand A**. All matter is composed of minute particles called atoms.	atoms and molecules. All atoms have a specific structure that is key to its interaction with other atoms. Some atoms contain more neutrons than others while maintaining a specific electron/proton balance. These atoms are called isotopes. Atoms have valence electrons that determine the types of bonds an atom can make with other atoms.	Demonstrate safe lab practice for all activities. Test solutions for electrical conductivity. Demonstrate the relationship between an atom's structure, chemical behavior, and its position in periodic table. Use models or drawings to illustrate how compounds are formed. Recognize that an atom with unequal numbers of positive and negative charges is an ion. Test various solids to determine which are good or poor conductors of electricity and relate this to the position of its constituent atoms on the periodic table. Demonstrate that ionic and molecular compounds are electrically neutral. Sketch and interpret graphs representing the melting, freezing, evaporation, and condensation of water.	Transfer tasks Performance Tasks Rubrics Teacher made post unit assessment Note: The assessment piece for this unit is not fully built out. When it is published, the assessment pieces as outlined by the coalition will be implemented for summative assessment purposes.

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
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. **Substrand C**. Isotopes of a given element differ in the number of neutrons in the nucleus. Their chemical properties remain essentially the same. **Substrand D**. 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. **Substrand E.** 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. **Substrand F**. 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. **Substrand H**. A change of phase may occur when there is a change in the potential energy of the atoms or molecules of a substance. **Strand Three** **Conservation of Matter** **Substrand A**. 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.		Balance a simple chemical equation. Conduct an investigation using the scientific method. Demonstrate how the properties of materials are used to the design manufactured goods.	

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
Unit Three: Earth Systems[1] **Timeline: 10 weeks** Note: The template for this unit is not available on the Delaware Department of Education science page. However, the standards, ideas, and learning targets below suggest the content that could be included in an Earth Systems unit. When the Earth Systems unit is available through the Science Coalition membership, this section of the curriculum map will be revised to include those standards and concepts.			
Standard One **The Nature and Application of Sciences and Technology** **Strand One** **Understandings and Abilities of Scientific Inquiry** **Substrand B**. Understand that: Science is distinguished from other ways of knowing by the use of empirical observations, experimental evidence, logical arguments and healthy skepticism. Be able to: Design and conduct valid scientific investigations to control all but the testable variable in order to test a specific hypothesis. **Substrand C.** Understand that: Theories in science are well-established explanations of natural phenomena that are supported by many confirmed observations and verified hypotheses. The application of theories allows people to make reasonable predictions. Theories may be amended to become more complete with the introduction of new evidence. **Substrand E**. Understand that: In communicating and defending the results of scientific inquiry, arguments must be logical and demonstrate connections between natural phenomena, investigations, and the historical body of scientific knowledge. (American Association for the Advancement of Science, 2001) **Strand Two** **Science, Technology and Society** **Substrand A**. The pursuit of science can generate the need for	**Big Ideas** **Earth System Science** analyses the dynamic interactions within and between the various subsystems: Geosphere, Biosphere (including humans), Hydrosphere and Atmosphere of System Earth, which resides within its suprasystem, the Solar System. Earth System Science emphasises how these interactions may bring about global environmental change, especially the sustainability of human life on planet Earth. A system may be considered as an arrangement of interdependent subsystems. The Geosphere is the	**Essential Questions:** How does understanding the properties of Earth materials and the physical laws that govern their behavior lead to prediction of Earth events? How do changes in one part of the Earth system affect other parts of the system? In what ways can Earth processes be explained as interactions among spheres? How does technology extend human senses and understanding?	**Suggested Formative Assessments:** Define Earth's subsystems Vocabulary work Observation of Student collaboration Investigation Journals Self assessment and reflection Teacher made pre-assessments Discussions/debates **Suggested Summative Assessments:** Teacher made post unit summative assessments Earth Science Research Project using multi-media technology

[1] Some of the content for this unit, to serve as a representative place holder prior to having access to the Science Coalition Unit is taken from **Project Atmosphere Australia Online** http://www.schools.ash.org.au/paa with permissions for use by non-profit educational agencies.

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
advanced technology. Advanced technology, in turn, can provide the opportunity to pursue new scientific knowledge. **Standard Five** **Earth's Dynamic Systems** **Strand One** **Components of Earth** **Substrand A**. 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. **Substrand 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 though erosion and weathering and of new rock through heat and compaction of the sediment **Substrand C**. 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. **Stand Two** **Interactions Throughout Earth's Systems** **Substrand A**. Earth's four spheres interact as part of a dynamic system in which changes over time are the result of external and internal energy sources. **Substrand 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.	solid Earth that includes continental and oceanic crust as well as the various layers of the Earth's interior. Solid Earth is separated into four distinct layers: crust, mantle, outer core and inner core. The Biosphere is the life zone of the Earth and includes all living organisms, including humans. (The Anthrosphere), and all organic matter that has not yet decomposed. The Hydrosphere includes all 'water' (H2O) on Earth in the gaseous state (water vapour), in the liquid state (water) and in the frozen state (The Cryosphere). The Atmosphere is the gaseous envelope that surrounds the Earth and constitutes the transition between the surface of the Earth and the vacuum of space.		

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
Substrand E. The atmosphere can be described as being in a state of dynamic equilibrium which is maintained in part by plate tectonic processes which recycle atmospheric gases trapped in the ground back into the atmosphere. **Strand Three** **Technology and Applications** **Substrand A.** Advances in science and technology (such as satellite imaging, Global Positioning Satellite (GPS), and Geographic Information Systems (GIS)) have improved our understanding of global and local changes that result from Earth system interactions, and our capacity to anticipate and mitigate natural hazards such as volcanoes and earthquakes.	Earth's systems can be broken down into individual components which have observable measurable properties. Earth's components form systems. These systems continually interact at different rates of time, affecting the Earth locally and globally. Technology enables us to better understand Earth's systems. It also allows us to analyze the impact of human activities on Earth's systems and the impact of Earth's systems on human activity.		

Curriculum Framework for Biology

School: The Delaware Met **Curricular Tool: Science and Global Issues - Biology** **Grade: 10**

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
Unit One: Sustainability **Timeline : 6 weeks**			
Standard 1: Nature and Application of Science and Technology[1] **Standard 6: Life Processes** **Strand:** Regulation and Behavior **Substrand B:** Multi-cellular animals have nervous	One of the most critical global issues of our time is how to live in ways that will sustain our planet's systems and resources. Humans can alter the living and non-living factors within an ecosystem,	How do humans have an impact on the diversity and stability of ecosystems? How can aspects of sustainability be viewed from a personal,	Formative Assessments: Teacher observation Graphic organizers Journal Entries KWLs Pre-tests

[1] Standard one represents the process or method through which students will be taught. This course is arranged around five large units. This organization allows students the time to inquire, reason, and test their ideas. To save space and repetition, each unit lists standard one, but the actual standards will only appear here.

Standard 1: Nature and Application of Science and Technology.

Strand: Understandings and Abilities of Scientific Inquiry

Substrand A. Understand that: Scientists conduct investigations for a variety of reasons including to explore new phenomena, to replicate other's results, to test how well a theory predicts, to develop new products, and to compare theories.

Be able to: Identify and form questions that generate a specific testable hypothesis that guide the design and breadth of the scientific investigation.

Substrand B. Understand that: Science is distinguished from other ways of knowing by the use of empirical observations, experimental evidence, logical arguments and healthy skepticism.

Be able to: Design and conduct valid scientific investigations to control all but the testable variable in order to test a specific hypothesis.

Substrand C. Understand that: Theories in science are well-established explanations of natural phenomena that are supported by many confirmed observations and verified hypotheses. The application of theories allows people to make reasonable amended to become more complete with the introduction of new evidence.

Be able to: Collect accurate and precise data through the selection and use of tools and technologies appropriate to the investigations. Display and organize data through the use of tables, diagrams, graphs, and other organizers that allow analysis and comparison with known information and allow for replication of results.

Substrand D. Understand that: Investigating most real-world problems requires building upon previous scientific findings and cooperation among individuals with knowledge and expertise from a variety of scientific fields. The results of scientific studies are considered valid when subjected to critical review where contradictions are resolved and the explanation is confirmed.

Be able to: Construct logical scientific explanations and present arguments which defend proposed explanations through the use of closely examined evidence.

Substrand E. Understand that: In communicating and defending the results of scientific inquiry, arguments must be logical and demonstrate connections between natural phenomena, investigations, and the historical body of scientific knowledge. (American Association for the Advancement of Science, 2001)

Be able to: Communicate and defend the results of scientific investigations using logical arguments and connections with the known body of scientific information.

Substrand F. Understand that: Knowledge and skill from sources other than science are essential to scientific inquiry. These include mathematics, reading, writing, and technology.

Be able to: Use mathematics, reading, writing and technology when conducting scientific inquiries.

Strand Science, Technology, and Society

Substrand A. The pursuit of science can generate the need for advanced technology. Advanced technology, in turn, can provide the opportunity to pursue new scientific knowledge.

Substrand B. The social, economic, and political forces of a society have a significant influence on what science and technology programs are pursued, funded, and implemented.

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
systems that generate behavioral responses. These responses result from interactions between organisms of the same species, organisms of different species, and from environmental changes. **Standard 7: Diversity and Continuity of Living Things** **Strand:** Reproduction, Heredity, and Development **Substrand I** 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. **Strand:** 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 advantageous characteristics. When populations become isolated, these changes may accumulate and eventually result in new species. **Substrand D:** 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. **Substrand E:** Organisms are classified into a hierarchy of groups and subgroups based on similarities in structure, comparisons in DNA and protein and evolutionary relationships. **Substrand F:** Genetically diverse populations are more likely to survive changing environments.	thereby creating changes to the overall system. 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. How can the cell theory explain the historical development of cells and explain how life evolved over time and will continue to evolve beyond our lives? <u>Concepts</u> Sustainability Indicators Life cycle of products Correlation and causality	community, and global perspective? How is matter transferred and energy transferred/transformed in living systems? <u>Students will</u> • investigate what it means to live in a sustainable world., • investigate why sustainability often raises more questions than it can answer. • discover that most sustainability problems are a result of people's overuse and misuse of the earth's resources. • will identify sustainability challenges in towns, countries, and larger regions around the world. • learn about communities that have applied scientific knowledge and technology to address their local resource challenges. • estimate the impact of your own lifestyle on the ecological sustainability of the planet. • apply the fundamentals of scientific inquiry to investigate a city facing a sustainability dilemma. The evidence gathered will then be used to suggest a course of action for the community.	Conferences Observations Question and Answer Sessions First Drafts / Quizzes Journals Interviews Short responses Quickwrites Tickets in/out of the door Participation in lab work Notetaking <u>Summative Assessments:</u> Tests on specific areas Essays/written report Presentations Projects Presentations Model of key ideas Lab reports Portfolios Checklists/rubrics Debates

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
Substrand G: Biological evolution is the foundation for modern biology and is used to make predictions for medical, environmental, agricultural and other societal purposes. **Standard 8: Ecology** **Strand:** Human Impact **Substrand A**. Exponential growth of the global human population and the resulting increase in consumption places severe stress on finite resources. **Substrand B.** Human decisions concerning the use of resources can affect the stability and biodiversity of the ecosystems and the natural recycling processes which maintain the quality of air, water, and land. **Substrand C.** Human activities have a major effect on other species. For example, increased land use reduces habitat available to other species, pollution changes the chemical composition of air, soil, and water, and introduction of non-native species disrupts the ecological balance. **Substrand D.** Advances in technology can help mitigate human impact on the environment and increase the carrying capacity of the ecosystem.			
Unit Two: Ecology – Living on Earth **Timeline: 7 weeks**			
Standard 1: Nature and Application of Science and Technology (all) **Standard 8:** Ecology **Strand:** Interactions within the Environment **Substrand A:** Earth's ecosystems are interconnected by biological, chemical, and physical processes. Changes in one ecosystem may have local and/or global consequences. **Substrand 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	Our world holds an amazing variety of organisms living in all sorts of environments. Organisms affect their environments, and in turn the environment affects them. Matter needed to sustain life is continually recycled among and between organisms and the environment. Energy from the Sun flows	How do we build sustainability from an ecosystems perspective? What does this mean for how humans impact various ecosystems? How do matter and energy link organisms to each other and their environments? How should fisheries be managed to build sustainability in the oceans?	<u>Formative Assessments:</u> Teacher observation Graphic organizers Journal Entries KWLs Pre-tests Conferences Observations Question and Answer Sessions First Drafts / Quizzes Journals Interviews

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
time and tend to have cyclic fluctuations around an equilibrium. **Substrand C:** 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. **Sustrand D:** 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. **Substrand E:** 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. **Substrand F:** Populations can increase through exponential growth. Higher populations result in competition for limited resources and increases in envrironmental pollution. **Strand:** Energy Flow and Material Cycles in the Environment **Substrand A.** The Law of Conservation of Matter applies to ecosystems. Matter needed to sustain life in ecosystems is continually recycled (e.g., carbon cycle, water cycle, nitrogen cycle, mineral cycles) among organisms and between organisms and the environment. **Substrand B**. The Law of Conservation of Energy applies to ecosystems. All energy is conserved as it passes from the Sun through an ecosystem. During energy transformations, some energy is converted to unusable heat. A continual input of energy from the Sun keeps the process going. **Substrand C**. At each level of a food pyramid some energy is stored, but much is dissipated as heat. Consequently the number of trophic levels is finite, and the number of individuals in a population that feed at	irreversibly through ecosystems and is conserved as organisms use and transform it. <u>Concepts:</u> Biomes Stability and climate change in ecosystems Invasive species Population dynamics Energy flow through ecosystems Carbon and nitrogen cycles Photosynthesis and cellular respiration Symbiotic relationships Predator-prey relationships	<u>Students will:</u> • understand the complex web of relationships within ecosystems is essential to understanding their sustainability. • describe how humans interact with ecosystems in many ways. • recognize that we rely on ecosystems to supply us food, shelter, energy, and the oxygen we breathe. As we consume resources and discard our wastes, we change ecosystems and sometimes threaten their sustainability. • examine a variety of ecological issues including the impact of human activities on ecosystems. • examine what can happen when people cause pollution in an area vital to nonhuman and human organisms. • learn about invasive species and their impacts on established ecosystems. You will also investigate how different management strategies affect the sustainability of fisheries. • plan and advocate for actions humans can take to help sustain ecosystems for the future.	Short responses Quickwrites Tickets in/out of the door Participation in lab work Notetaking <u>Summative Assessments:</u> Tests on specific areas Essays/written report Presentations Projects Presentations Model of key ideas Lab reports Portfolios Checklists/rubrics Debates

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
higher levels is limited. **Substrand D.** Biomagnification is an increase in the concentration of a chemical in a biological organism over time, compared to the chemical's concentration in the environment. Compounds accumulate in living things any time they are taken up and stored faster than they are broken down (metabolized) or excreted. Biomagnification increases as trophic levels increase. **Strand:** Human Impact **Substrand E**. The complexity and interaction of these ecosystems requires individual and collaborative efforts on a local, regional, national, and international scale.			
Unit Three: Cell Biology **Timeline: 8 weeks**			
Standard 1: Nature and Application of Science and Technology (all) **Standard 6: Life Processes** **Strand:** Structure/Function Relationship **Substrand A:** 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. **Substrand B.** Cells take highly varied forms in different plants, animals, and microorganisms. Structural variations among cells determine the function each cell performs. **Substrand C:** 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. **Substrand D.** The cell membrane is dynamic and interacts with internal membranous structures as materials are transported into and out of the cell.	Living systems, from the organismic to the cellular level, demonstrate the complementary nature of structure and function. The effects of diseases vary from mild to devastating and affect sustainability at the environmental, economic, and social level. Diseases are caused by infectious microbes, such as bacteria and viruses, genetic factors, and other events that cause breakdowns in the structure or function of cells. Understanding the mechanisms of a disease is essential to people's ability to prevent, eradicate, and cure it and to maintain the sustainability of populations and communities. <u>Concepts:</u>	How does structure relate to function in living systems from the organismal to the cellular level? How can the disparities between developing and developed countries in terms of diseases impacting human life? How do we make decisions about priorities for disease interventions to prevent or treat diseases that limit the social, economic, and environmental progress of a culture? How can the cell theory explain the historical development of cells and explain how life evolved over time?	<u>Formative Assessments:</u> Teacher observation Graphic organizers Journal Entries KWLs Pre-tests Conferences Observations Question and Answer Sessions First Drafts / Quizzes Journals Interviews Short responses Quickwrites Tickets in/out of the door Participation in lab work Notetaking <u>Summative Assessments:</u> Tests on specific areas Essays/written report

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
Substrand E. The transport of materials across the membrane can be passive (does not require the expenditure of cellular energy), or active (requires the expenditure of cellular energy) depending upon membrane structure and concentration gradients. **Substrand F:** 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. **Substrand H:** 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 whole organism. **Strand 2:** Matter and Energy Transformations **Substrand A:** 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 transformations are made possible by protein catalysts called enzymes. **Substrand 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. **Substrand C:** 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. **Substrand D:** Photosynthesis and cellular respiration are complementary processes resulting in the flow of	Cellular nature of life Cell structure and function Cell specialization and differentiation Cell division and the cell cycle Microbes and infectious diseases Breakdown of cellular function in diseases, such as diabetwes and cancer Respiration, photosynthesis, and cellular macromolecules	Students will: • examine several diseases and their social, environmental, and economic consequences. • learn about the mechanism of these diseases at the cellular level. • investigate the structures and functions of normal cells and some of the processes that occur inside these cells. • research and recommend how to best allocate limited funding to address world health problems.	Presentations Projects Presentations Model of key ideas Lab reports Portfolios Checklists/rubrics Debates

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
energy and the cycling of matter in ecosystems.			
Unit Four: Genetics – Feeding the World **Timeline: 7 weeks**			
Standard 6: Life Processes **Strand:** Structure/Function Relationship **Substrand F:** 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. **Strand: Regulation and Behavior** **Substrand** **Substrand B**. The scientific investigation of cellular chemistry enables the biotechnology industry to produce medicines, foods, and other products for the benefit of society. **Standard 7:** Diversity and Continuity of Living Things **Strand:** Reproduction, Heredity, and Development **Substrand A:** 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. **Substrand B:** Known patterns of inheritance can be used to make predictions about genetic variation. **Substrand C:** 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. **Substrand D:** 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. **Substrand E:** During the cell cycle, DNA of the parent	Organisms reproduce, develop, have predictable life cycles, and pass on heritable traits to their offspring. Modern scientists study genetics to learn more about how genes work and to solve such practical problems as enhancing crop productivity, curing diseases, and producing new fuels. One dynamic, and sometimes controversial, technology that has emerged from genetics is genetic modification. The development of technology has allowed us to apply our knowledge of genetics, reproduction, development and evolution to meet human needs and wants. Living systems, from the organismic to the cellular level, demonstrate the complementary nature of structure and function. <u>Concepts</u> Sexual and asexual reproduction Mitosis and Meiosis Genotype and phenotype Mendel's research Genetic crosses, Punnett squares, and	Why do offspring resemble their parents and why are some sexes more likely than others to inherit specific traits? How does natural selection encourage inter and intra-specific diversity over time? How can our understanding of Mendelian genetics be used to predict patterns of inheritance? 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? How does recombinant DNA technology, as it is applied to genetic engineering, meet human needs and wants? What issues surround selective breeding and genetic modification? How can we collect data to make an informed decision about these evolving issues? How are genetically modified	<u>Formative Assessments:</u> Teacher observation Graphic organizers Journal Entries KWLs Pre-tests Conferences Observations Question and Answer Sessions First Drafts / Quizzes Journals Interviews Short responses Quickwrites Tickets in/out of the door Participation in lab work Notetaking <u>Summative Assessments:</u> Tests on specific areas Essays/written report Presentations Projects Presentations Model of key ideas Lab reports Portfolios Checklists/rubrics Debates

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
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. **Substrand F:** 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. **Substrand G**. 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. **Substrand H:** The sex chromosomes contain different genes, and therefore, certain traits will show patterns of inheritance based on gender.	pedigrees Patterns of inheritance Genes, alleles, chromosomes, and DNA Flow of genetic information Selective breeding Genetically modified organisms Biotechnology	organisms, particularly in the production of agricultural crops, being used? Who benefits from their use? Students will • learn about the historical desire to breed animals to create more desirable offspring. • consider how learning to manipulate the genes of various species can help or hinder animals and people. • debate if being about to modify genes will lead to unintended consequences for the environment and/or human health. • investigate how genes and patterns of inheritance function in organisms and generations of organisms. • describe the procedures and results of genetic modification • debate some of the benefits and trade-offs of producing specific genetically modified organisms.	
Unit Five: Evolution – Maintaining Diversity **Timeline: 7 weeks**			
Standard 1: Nature and Application of Science and Technology **Standard 6:** Life Processes **Strand 1:** Structure/Function Relationship **Substrand F:** Cells store and use information to guide	Each ecosystem differs from others in its varieties of species, genetic makeup of its species, and the evolutionary relationships of species. All of these levels of variation	How do we conserve genetic, species, and ecosystem diversity? How does natural selection encourage inter and intra-specific diversity over time?	Formative Assessments: Teacher observation Graphic organizers Journal Entries KWLs Pre-tests

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
their functions. DNA molecules in each cell carry coded instructions for synthesizing protein molecules. The protein molecules have important structural and regulatory functions. **Standard 7:** Diversity and Continuity of Living Things **Strand 2:** Diversity and Evolution **Substrand A:** 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. **Substrand 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. **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, 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. **Substrand D**. 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. **Substrand E:** Organisms are classified into a hierarchy of groups and subgroups based on similarities in structure, comparisons in DNA and protein and evolutionary relationships. **Substrand F:** Genetically diverse populations are more likely to survive changing environments.	comprise the earth's biodiversity. 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. 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. <u>Concepts</u> Biodiversity Ecosystem services and humans' impact on species Natural selection and adaptation Darwin's research Geologic time Interpreting the fossil record Phylogeny Microevolution and macroevolution Biological species concept and specialization The genetic basis of evolution	What are the benefits to developing ecosystems services and intrinsic value models for conservation? Why is sexual reproduction important to the survival of most species? Why is diversity important to a species' ability to survive? <u>Students will</u> • study the evolutionary processes that produce biodiversity, what caused the subtle and dramatic shifts that occurred in the past, and how biodiversity might change in the future. • be challenged to complete a project as a conservationist, focusing on understanding the biodiversity of an area in order to establish priorities for conservation of species. • debate how human activities affect biodiversity. • investigate the levels of biodiversity and the evolutionary processes that increase, decrease, or maintain biodiversity. • examine humans' social, environmental, and economic influences on biodiversity, and make recommendations	Conferences Observations Question and Answer Sessions First Drafts / Quizzes Journals Interviews Short responses Quickwrites Tickets in/out of the door Participation in lab work Notetaking <u>Summative Assessments:</u> Tests on specific areas Essays/written report Presentations Projects Presentations Model of key ideas Lab reports Portfolios Checklists/rubrics Debates

Standards Alignment	Unit Concept Big Ideas	Essential Questions Student Learning Targets	Assessments
Substrand G. Biological evolution is the foundation for modern biology and is used to make predictions for medical, environmental, agricultural and other societal purposes.		for which forest area on a fictitious island should receive funds for conservation.	

Curriculum Framework for Chemistry

School: The Delaware Met **Curricular Tool: The Natural Approach to Chemistry** **Grade: 11**

Standards Alignment	Unit Concepts	Essential Questions	Assessments
Unit One: The Science of Chemistry **Timeline: 3 weeks**			
Standard One: Nature and Application of Science and Technology **Strand:** Understandings and Abilities of Scientific Inquiry **Substrand A**. Understand that: Scientists conduct investigations for a variety of reasons including to explore new phenomena, to replicate other's results, to test how well a theory predicts, to develop new products, and to compare theories. Be able to: Identify and form questions that generate a specific testable hypothesis that guide the design and breadth of the scientific investigation. **Substrand B.** Understand that: Science is distinguished from other ways of knowing by the use of empirical observations, experimental evidence, logical arguments and healthy skepticism. Be able to: Design and conduct valid scientific investigations to control all but the testable variable in order to test a specific hypothesis. **Substrand C.** Understand that: Theories in science are well-established explanations of natural phenomena that are supported by many confirmed observations and verified hypotheses. The application of theories allows people to make reasonable predictions. Theories may be amended to become more complete with the introduction of new evidence. Be able to: Collect accurate and precise data	**Enduring Understanding:** Scientific inquiry involves asking scientifically-oriented questions, collecting evidence, forming explanations, connecting explanations to scientific knowledge and theory, and communicating and justifying the explanation. When materials interact within a closed system, the total mass of the system remains the same. <u>What Chemistry is About</u> Using clear standards of measurements, we can communicate more effectively in answering simple questions. Measurements that are not accurate could lead you to the wrong conclusion. If a measurement is not precise, you may not be able to tell the difference between agreement and disagreement. Science encompasses very large and very small objects. The scientific notation is a shorthand system to write very large and very small numbers. <u>Scientific Inquiry</u> The universe obeys a set of unwritten rules called natural laws. Science is about using the scientific method to discover what those natural laws are. <u>Matter and Energy</u> Whether matter is solid, liquid, or gas depends on how	**Essential Questions:** What makes a question scientific? What constitutes evidence? When do you know you have enough evidence? Why is it necessary to justify and communicate an explanation? How does conservation of mass apply to the interaction of materials in a closed system? <u>Questions for Inquiry:</u> How did scientists "discover" the atom, when they couldn't see it? How do scientists know when they have the right explanation? How do we measure liquid quantities in chemistry? How can we measure very small quantities? How does scientific inquiry help scientists discover and text natural laws? How do we measure quantities of matter in chemistry?	Assessment variables explored by the various tools are: • Communication skills, Understanding concepts, • Organizing scientific ideas, Designing scientific investigations, • Recording and organizing scientific data, • Analyzing scientific data, Recognizing and evaluating • Scientific evidence, understanding quantitative analysis. Specific Tools: 1. Questions at the end of each chapter that include: • conceptual questions • multiple choice questions • graphical analysis questions • short answer questions • quantitative problems 2. Lab investigations have from 3 to 6 formative assessment elements built directly into the investigation. 3. Examples of average and exemplary student work and scoring examples. 4. End of chapter test bank also

Standards Alignment	Unit Concepts	Essential Questions	Assessments
through the selection and use of tools and technologies appropriate to the investigations. Display and organize data through the use of tables, diagrams, graphs, and other organizers that allow analysis and comparison with known information and allow for replication of results. **Substrand D.** Understand that: Investigating most real-world problems requires building upon previous scientific findings and cooperation among individuals with knowledge and expertise from a variety of scientific fields. The results of scientific studies are considered valid when subjected to critical review where contradictions are resolved and the explanation is confirmed. Be able to: Construct logical scientific explanations and present arguments which defend proposed explanations through the use of closely examined evidence. **Substrand E.** Understand that: In communicating and defending the results of scientific inquiry, arguments must be logical and demonstrate connections between natural phenomena, investigations, and the historical body of scientific knowledge. (American Association for the Advancement of Science, 2001) Be able to: Communicate and defend the results of scientific investigations using logical arguments and connections with the known body of scientific information. **Substrand F.** Understand that: Knowledge and skill from sources other than science are essential to scientific inquiry. These include mathematics, reading, writing, and technology. Be able to: Use mathematics, reading, writing and technology when	much internal thermal energy is associated with its constituent molecules and atoms. Energy is not created or destroyed but converted from one form to another.	How do we compare quantities of matter in different forms, such as liquids, solids, powders, solutions, and gasses? How do we translate between units?	provides a structured assessment tool which is based on extensive classroom trials and teacher feedback. 5. Other teacher-made formative assessments – quizzes, quickwrites, observation, graphic organizers, tickets out

Standards Alignment	Unit Concepts	Essential Questions	Assessments
conducting scientific inquiries. **Standard Two: Materials and Their Properties** **Strand:** Conservation of Matter **Substrand** A. 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. **Standard Three:** Energy and Its Effects **Strand:** Forms and Sources of Energy **Substrand D.** Thermal (heat) energy is associated with the random kinetic energy of the molecules of a substance.			
Unit Two: Matter and Atoms **Timeline: 2 weeks**			
Standard Two: Materials and Their Properties **Strand:** Properties and Structure of Materials **Substrand A**. 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. **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 C**. Isotopes of a given element differ in the number of neutrons in the	**Enduring Understanding:** The structures of materials determine their properties. <u>Matter and the Elements</u> Chemistry tells us how one kind of matter can be changed into a completely different kind of matter. Physical properties can be measured or seen through direct observations. Chemical properties are observed when a substance changes into a different substance. Matter can be mixtures or substances. The smallest unit of a pure substance is an element. Each element is a unique type of atom. The periodic table organizes elements according to how they combine with other elements (based on their chemical properties).	**Essential Question:** How do the properties and structures of materials determine their uses? How do the components determine the properties of mixtures**?** <u>Questions for Inquiry:</u> How do we explain the diversity of matter? What does "pure" mean? Is "pure" to a chemist the same as "pure" in every day conversation? What is a chemical formula and how is it used?	Assessment variables explored by the various tools are: • Communication skills, Understanding concepts, • Organizing scientific ideas, Designing scientific investigations, • Recording and organizing scientific data, • Analyzing scientific data, Recognizing and evaluating • Scientific evidence, understanding quantitative analysis. Specific Tools: 1. Questions at the end of each chapter that include: • conceptual questions • multiple choice questions

Standards Alignment	Unit Concepts	Essential Questions	Assessments
nucleus. Their chemical properties remain essentially the same. **Strand:** Mixtures and Solutions **Substrand A.** Properties of solutions, such as pH, solubility, and electrical conductivity depend upon the concentration and interactions of the solute and solvents. **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.	<u>Molecules and Compounds</u> The properties of a compound depend more on the exact structure of the molecule than on the individual elements from which it is made. Compounds can be built using atoms and attending to the type of atom and the arrangement of atoms. Atoms with electric charge are known as ions. <u>Mixtures and Solutions</u> Mixtures can be homogeneous or heterogeneous depending on whether or not the types of matter are distributed evenly the same throughout the sample. Solutions are made when solutes are dissolved into a solvent. Density can be an important clue in identifying a substance.	How do we represent the number of each element in a chemical formula? Does the way a chemical formula is written give us information about the molecule? What does it mean to say a solution contains parts per million? How is parts per million measured? Do equal sizes contain equal amounts of matter? What determines how much matter there is per unit of volume?	• graphical analysis questions • short answer questions • quantitative problems 2. Lab investigations have from 3 to 6 formative assessment elements built directly into the investigation. 3. Examples of average and exemplary student work and scoring examples. 4. End of chapter test bank also provides a structured assessment tool which is based on extensive classroom trials and teacher feedback. 5. Other teacher-made formative assessments – quizzes, quickwrites, observation, graphic organizers, tickets out
Unit Three: Temperature, Energy, and Heat **Timeline: 2 weeks**			
Standard Two: Materials and Their Properties **Strand:** Properties and Structure of Materials **Substrand H.** A change of phase may occur when there is a change in the potential energy of the atoms or molecules of a substance. **Standard Three: Energy and Its Effects** **Strand:** Form and Sources of Energy **Substrand D**. Thermal (heat) energy is associated with the random kinetic energy of the molecules of a substance.	**Enduring Understanding:** 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). <u>Temperature</u> Molecules are in constant, random motion. Random motion affects temperature while non-random motion does not affect temperature. Temperature is the measure of the average kinetic energy of atoms or molecules.	**Essential Question:** How do we know that things have energy? **<u>Questions for Inquiry:</u>** What is the difference between heat and temperature? Suppose an equal mass of sand and water are at the same temperature. Do they have the same amount of energy? How does specific heat affect temperature changes?	Assessment variables explored by the various tools are: • Communication skills, Understanding concepts, • Organizing scientific ideas, Designing scientific investigations, • Recording and organizing scientific data, • Analyzing scientific data, Recognizing and evaluating • Scientific evidence, understanding quantitative analysis.

Standards Alignment	Unit Concepts	Essential Questions	Assessments
Strand: Energy Interaction with Materials **Substrand A.** 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.	<u>Heat and Thermal Energy</u> Energy (heat) spontaneously flows from higher temperature to lower temperature. The energy inside an isolated system is **constant**. The energy lost by a system **must** be gained by the surroundings or another system. <u>Phase Changes</u> Phase changes are physical changes. The loss or gain in thermal energy results in a phase change. Phase changing involves energy that is not available for changing temperature.	Why does heat flow? How does heat flow? When does heat stop flowing? How can we move from solid to liquid, and from liquid to gas? How much energy does it take to melt ice into liquid water? Where does the energy go during phase changes?	Specific Tools: 1. Questions at the end of each chapter that include: • conceptual questions • multiple choice questions • graphical analysis questions • short answer questions • quantitative problems 2. Lab investigations have from 3 to 6 formative assessment elements built directly into the investigation. 3. Examples of average and exemplary student work and scoring examples. 4. End of chapter test bank also provides a structured assessment tool which is based on extensive classroom trials and teacher feedback. 5. Other teacher-made formative assessments – quizzes, quickwrites, observation, graphic organizers, tickets out
Unit Four: Physical and Chemical Change **Timeline: 2 weeks**			
Standard Two: Materials and Their Properties **Strand:** Chemical Reactions **Substrand A.** Chemical reactions result in new substances with properties that are different from those of the component parts (reactants). **Substrand D.** Energy is transformed in chemical reactions. Energy diagrams can illustrate this transformation. Exothermic	**Enduring Understanding:** There are several ways in which elements and/or compounds react to form new substances and each reaction involves energy. <u>Understanding Chemical Changes</u> In a physical change the molecules are rearranged, intermolecular forces are broken, interatomic forces are not broken.	**Essential Question:** What determines the type and extent of a chemical reaction? <u>Questions for Inquiry:</u> Can heat be taken or added without the temperature changing? What is the role of energy in	Assessment variables explored by the various tools are: • Communication skills, Understanding concepts, • Organizing scientific ideas, Designing scientific investigations, • Recording and organizing scientific data, • Analyzing scientific data,

Standards Alignment	Unit Concepts	Essential Questions	Assessments
reactions release energy. Endothermic reactions absorb energy.	In a chemical change the atoms are rearranged and interatomic forces are broken to create a new substance. This change is irreversible. Each type of atom allows only certain chemical bonds to be formed. This is due to the structure of the atom A chemical bond is formed by sharing or transferring electrons. Chemical bonds form because there is an advantage in energy. All chemical reactions involve three key components: reactants, products, energy. <u>Chemical Reactions</u> Chemical equations must be balanced so that mass is conserved An endothermic reaction requires an input of energy while an exothermic reaction releases energy. Energy can be neither created nor destroyed. <u>Chemical Reactions in a Lab</u> Many reactions, including those that sustain life, involve chemicals dissolved in water. A solution with water as the solvent is called an aqueous solution. Two types of chemical reactions take place in an aqueous environment: redox reactions (transfer of electrons) and acide-base reatctions (transfer of protons, H+ions).	phase changes? What are the signs or potential evidence that a chemical reaction has occurred? What happens during a chemical change? How do we describe chemical changes? What is the difference between acid–base reactions, oxidation–reduction reactions, and precipitate reactions?	Recognizing and evaluating • Scientific evidence, understanding quantitative analysis. Specific Tools: 1. Questions at the end of each chapter that include: • conceptual questions • multiple choice questions • graphical analysis questions • short answer questions • quantitative problems 2. Lab investigations have from 3 to 6 formative assessment elements built directly into the investigation. 3. Examples of average and exemplary student work and scoring examples. 4. End of chapter test bank also provides a structured assessment tool which is based on extensive classroom trials and teacher feedback. 5. Other teacher-made formative assessments – quizzes, quickwrites, observation, graphic organizers, tickets out

Standards Alignment	Unit Concepts	Essential Questions	Assessments
Unit Five: The Structure of the Atom **Timeline: 3 weeks**			

Standard Two: Materials and Their Properties
Strand: 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 E. 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.
Substrand F. 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.
 	
Strand: Conservation of Matter
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.
	Enduring Understanding:
	The structures of materials determine their properties.
	
	<u>The Atom has Structure</u>
	Atoms are made from smaller particles. Each of the elements is a unique type of atom.
	
	You cannot divide something in half forever. The smallest piece of matter is called an atom.
	
	Atoms are made from smaller particles.
	
	Dalton's Postulates:
	1. All elements are made of tiny indivisible particles called atoms.
	2. All atoms of the same element are the same, but different from atoms of every other element.
	3. Chemical reactions rearrange atoms but do not create, destroy, or convert atoms from one element to another.
	4. Compounds are made from combining atoms in simple whole number ratios.
	
	The size of the atom comes mostly from the space occupied by the electrons. The mass of the atom comes mostly from the nucleus.
	
	The number of protons is also called the atomic number for that element.
	
	Electrons are very light and fast. They are <u>not</u> organized along orbits around the nucleus.
	
	Except for mass, virtually every property of atoms is determined by electrons, including size and chemical bonding.
	
	Neutrons act as "glue." They hold protons together in
		Essential Question:
		How do the properties and structures of materials determine their uses?
		
		<u>Questions for Inquiry:</u>
		If an atom is made of even smaller things, what is inside the atom itself?
		
		Why do some elements have more than one number above the symbol? What are the variations in this number called?
		
		What happens when you change the number of protons, electrons, or neutrons?
		
		How do we see color?
		
		How is color measured?
		
		How can a spectrophotometer be used to study light?
		
		How is color used to identify elements?
		
		What is the relationship between the atomic mass of an element and the number of spectral lines?
		
		Why is the periodic table shaped the way that it is?
			Assessment variables explored by the various tools are:
			• Communication skills, Understanding concepts,
			• Organizing scientific ideas, Designing scientific investigations,
			• Recording and organizing scientific data,
			• Analyzing scientific data, Recognizing and evaluating
			• Scientific evidence, understanding quantitative analysis.
			
			Specific Tools:
			1. Questions at the end of each chapter that include:
			  • conceptual questions
			  • multiple choice questions
			  • graphical analysis questions
			  • short answer questions
			  • quantitative problems
			2. Lab investigations have from 3 to 6 formative assessment elements built directly into the investigation.
			3. Examples of average and exemplary student work and scoring examples.
			4. End of chapter test bank also provides a structured assessment tool which is based on extensive classroom trials and teacher

Standards Alignment	Unit Concepts	Essential Questions	Assessments
Standard Three: Energy and Its Effects **Strand:** Forces and the Transfer of Energy **Substrand A:** Forces change the motion of objects. Newton's Laws can be used to predict these changes. **Substrand F**. Electric forces between charged objects are attractive or repulsive. 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. **Substrand I.** The nuclear forces that hold the nucleus of an atom together are much stronger than the repulsive electric forces acting between the protons that would make the nucleus fly apart, therefore, most atoms have stable nuclei.	the nucleus. The strong nuclear force attracts protons to protons, neutrons to neutrons, and protons to neutrons. Electrons repel each other, but don't "fall into" the nucleus because they are in constant motion. <u>The Quantum Atom</u> Elements in the same column have similar chemical properties. Electrons are responsible for these chemical properties. Light waves come in bundles of light (photons), and an electron behaves as a wave. The higher the frequency of the way, the higher the energy. The wavelength of the electron must be a "multiple" of the "size" of the atom. Energy is quantized. Bohr Models: Only certain energy levels are allowed in each molecule. Different quantum states can have the same wavelength. Electrons are arranged in a pattern according to energy levels. - Lower energy levels are filled first - There can only be one electron per quantum state <u>Electron Configurations</u> Electron configurations determine the properties of atoms. Electrons settle into the lowest unfilled quantum states. <u>Light and Spectroscopy</u> Light is a form of electromagnetic energy that comes	Why does the atom absorb only specific (discrete) energies?	feedback. 5. Other teacher-made formative assessments – quizzes, quickwrites, observation, graphic organizers, tickets out

Standards Alignment	Unit Concepts	Essential Questions	Assessments
	from electrons in atoms. The human eye can only detect a certain range of that energy: the visible spectrum. Visible light is only a small range in the electromagnetic spectrum. A wave moves forward one wavelength with each complete oscillation. Wavelength and frequency are related. Each type of atom has a different electron structure. Each element has unique energy levels like a fingerprint.		
Unit Six: Elements and the Periodic Table **Timeline: 2 weeks**			

Standard Two: Materials and Their Properties
Strand: Properties and Structure of Materials
D. 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.
Substrand E. 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
	Enduring Understanding:
	Understanding past processes and contributions is essential in building scientific knowledge.
	
	The structures of materials determine their properties.
	
	<u>The Periodic Table</u>
	The modern periodic table arranges elements in order of increasing atomic number, not atomic mass.
	
	Scientists have been adding elements to the periodic table, as more are discovered or created.
	
	Electron structure was discovered after the periodic table was developed, but orbitals also follow a pattern in the periodic table.
	
	The modern periodic table shows trends or repeating patterns in atomic radii, electronegativity and ionization energy
		Essential Questions:
		How have past scientific contributions influenced current scientific understanding of the world?
		
		What do we mean in science when we say that we stand on the shoulders of giants?
		
		How do the properties and structures of materials determine their uses?
		
		<u>Questions for Inquiry:</u>
		Are you made of star dust?
		
		What does "periodic" in "periodic table" mean?
		
		What are some characteristics of the elements?
			Assessment variables explored by the various tools are:
			• Communication skills, Understanding concepts,
			• Organizing scientific ideas, Designing scientific investigations,
			• Recording and organizing scientific data,
			• Analyzing scientific data, Recognizing and evaluating
			• Scientific evidence, understanding quantitative analysis.
			
			Specific Tools:
			1. Questions at the end of each chapter that include:
			  • conceptual questions
			  • multiple choice questions
			  • graphical analysis

Standards Alignment	Unit Concepts	Essential Questions	Assessments
such as conductivity, malleability, and ductility. **Standard One: Nature and Application of Science and Technology** **Strand:** History and Context of Science **Substrand A**. New disciplines of science emerge as older disciplines interface into an integrated study of the natural world. As the body of scientific knowledge grows, the boundaries between individual disciplines diminish. **Standard Four: Earth and Space** **Strand:** 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. **Strand:** Stars and Galaxies **Substrand E**. Most elements are formed as a result of natural astronomical processes, either in the Big Bang itself or in the natural evolution of stars.	<u>Properties of Groups of Elements</u> Elements that belong to the same period in the periodic table have similar chemical properties. This is because they have similar electron configurations, and electrons are responsible for bonding properties. <u>Valence</u> Elements that belong to the same group in the periodic table have the same number of valence electrons. Only valence electrons in the outer unfilled shells are involved in chemical bonding. The Lewis dot diagram is a way to show valence electrons for an atom.	Why do elements in Group 1 have the tendency to form +1 ions? Why do elements in Group 2 have the tendency to form +2 ions? Why do elements in Group 17 have the tendency to form –1 ions? Elements in group 18 are called "noble gases" because they do not chemically bond with any of the other elements. Why not? Is the periodic table just an organizational system? Can it be used as a tool? Given some blanks in the periodic table, can you figure out which element corresponds to which box? Why is the periodic table shaped the way that it is?	questions • short answer questions • quantitative problems 2. Lab investigations have from 3 to 6 formative assessment elements built directly into the investigation. 3. Examples of average and exemplary student work and scoring examples. 4. End of chapter test bank also provides a structured assessment tool which is based on extensive classroom trials and teacher feedback. 5. Other teacher-made formative assessments – quizzes, quickwrites, observation, graphic organizers, tickets out
Unit Seven: Bonding **Timeline: 3 weeks**			
Standard 2: Materials and Their Properties **Strand:** Properties and Structure of Materials **Substrand E:** An atom's electron structure determines its physical and chemical properties. Metals have valence electrons that can be modeled as a sea of electrons	**Enduring Understanding:** The structures of materials determine their properties. <u>What is a chemical bond?</u> The binding force between two atoms is an equilibrium of several forces. The electron cloud responds to changes in the	**Essential Question:** How do the types of chemical bonding affect the way we can use a material? <u>Questions for Inquiry:</u> How do bonds form?	Assessment variables explored by the various tools are: • Communication skills, Understanding concepts, • Organizing scientific ideas, Designing scientific investigations, • Recording and organizing

Standards Alignment	Unit Concepts	Essential Questions	Assessments
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. **Substrand F:** 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. **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. **Standard Three: Energy and Its Effects** **Strand:** Forms and Sources of Energy **Substrand F.** Chemical energy is derived from the making and breaking of chemical bonds.	electromagnetic environment. That distortion is called polarization. At a certain distance there is an equilibrium between attractive and repulsive forces. If the distance is close enough, an electron can be transferred or shared. A chemical bond forms. In a covalent bond Electrons are shared between the two nuclei. In an ionic bond one or more electrons are transferred to form ions. The positive and negative ions attract each other. Electronegativity is the relative affinity of an element for electrons from other atoms. Higher electronegativity means stronger attraction for electrons. The degree of electronegativity in the atom creates nonpolar covalent bonds, polar covalent bonds, and ionic bonds. Most molecules contain more than two atoms and more than one bond. Nonpolar bonds in a molecule make the molecule nonpolar. Polar bonds in a molecule make the molecule polar. <u>Valence Electrons and Bonding Patterns</u> The number of valence electrons affects bond number and ion charge. Valence electrons in combination with properties of ionization energy and electronegativity determine -specific ionic charge.	How many valence electrons does a hydrogen atom have? How many valence electrons does an oxygen atom have? How many electrons are available for bonding in hydrogen? What about in oxygen? How can you create two different molecules, each with that same chemical formula where each structure must use all available bonding sites on all atoms? Why isn't water a linear molecule? How can you identify planar, linear, tetrahedral and ring molecules?	scientific data, • Analyzing scientific data, Recognizing and evaluating • Scientific evidence, understanding quantitative analysis. Specific Tools: 1. Questions at the end of each chapter that include: • conceptual questions • multiple choice questions • graphical analysis questions • short answer questions • quantitative problems 2. Lab investigations have from 3 to 6 formative assessment elements built directly into the investigation. 3. Examples of average and exemplary student work and scoring examples. 4. End of chapter test bank also provides a structured assessment tool which is based on extensive classroom trials and teacher feedback. 5. Other teacher-made formative assessments – quizzes, quickwrites, observation, graphic organizers, tickets out

Standards Alignment	Unit Concepts	Essential Questions	Assessments
	-number of covalent bonds formed. Ionic substances typically form crystals. Electrons in covalent bonds are transferred so that each element has 8 valence electrons and has the same configuration as the closest noble gas. The light elements H, Li, Be, and B prefer to have 2 valence electrons. When forming ions, atoms gain or lose one or more electrons to reach the same electron configuration as the closest noble gas, with 8 valence electrons. <u>Molecular Geometry and Lewis Dot Structures</u> Lewis structures for individual atoms are like puzzle pieces. Put them together to form molecules. Use Lewis structures to predict the chemical formula, the bonding pattern, and the shape of the molecule. Sharing a pair of electrons is called a single bond. Carbon, nitrogen and oxygen commonly form double and triple bonds. The lone pairs of electrons are not involved in bonding, but affect the shape of the molecule. Similar charges repel each other. Identify regions of electron density to predict the molecular geometry. Two areas of electron density repel to form linear shapes. Three areas of electron density repel to form trigonal planar shapes. Different geometries formed by atoms with four regions of electron density: tetrahedral, trigonal		

Standards Alignment	Unit Concepts	Essential Questions	Assessments
	pyramidal, and bent.		
Unit Eight: Compounds and Molecules **Timeline: 4 weeks**			

Standard 2: Materials and Their Properties
Strand: Properties and Structures of Materials
Substrand A: 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.
Substrand F. 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.
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.
Substrand H. A change of phase may occur when there is a change in the potential energy of the atoms or molecules of a substance.
 	
Strand: Chemical Reactions
Substrand F. Certain small molecules (monomers) react with one another in repetitive fashion (polymerization) to form
	Enduring Understanding:
	The structures of materials determine their properties.
	
	<u>Ionic Compounds</u>
	In any ionic crystal, the ratio of positive ions to negative ions must allow for all of the positive charge to cancel out all of the negative charge.
	
	The ionic structure leads to the following physical properties: Ionic substances are solid at room temperature; ionic substances have very high melting points; ionic substances are hard but brittle.
	
	When melted or dissolved, ions are free to move around, making it possible for an ionic solution to conduct electricity.
	
	<u>Molecular Compounds</u>
	Molecular compounds are held together by covalent bonds.
	
	Properties of molecular compounds vary widely by their:
	• Hardness: Some are hard and brittle; some are flexible, soft or mushy
	• State of matter: They can be solid, liquid or gas at room temperature
	• Boiling points: Their boiling points can vary from –253°C to over 1,000°C
	• Ability to conduct electricity: Most do not conduct electricity well
	
	Properties of molecular substances depend on the structure of the individual molecule and the attractions between molecules.
		Essential Question:
		How do the properties and structures of materials determine their uses?
		
		<u>Questions for Inquiry:</u>
		How are physical and chemical properties related to atom structures and chemical bonding?
		
		What are intermolar forces? Where do they come from? Do all molecules feel them?
		
		Can something that contains water still be dry?
		
		Given common chemicals, can you recognize some of the compounds? Can you figure out their chemical formulas? Do you know what these compounds look like?
		
		What is different about naming molecular and ionic compounds?
		
		What is the same about naming molecular and ionic compounds?
		
		What is the "common name" for dihydrogen monoxide?
			Assessment variables explored by the various tools are:
			• Communication skills, Understanding concepts,
			• Organizing scientific ideas, Designing scientific investigations,
			• Recording and organizing scientific data,
			• Analyzing scientific data, Recognizing and evaluating
			• Scientific evidence, understanding quantitative analysis.
			
			Specific Tools:
			1. Questions at the end of each chapter that include:
			  • conceptual questions
			  • multiple choice questions
			  • graphical analysis questions
			  • short answer questions
			  • quantitative problems
			2. Lab investigations have from 3 to 6 formative assessment elements built directly into the investigation.
			3. Examples of average and exemplary student work and scoring examples.
			4. End of chapter test bank also provides a structured assessment tool which is based on extensive classroom

Standards Alignment	Unit Concepts	Essential Questions	Assessments
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.	Molecules can be classified into different categories: small, medium, large-polymer, large network. Most small molecules (no more than a dozen atoms) are liquids or gases at room temperature. Some of the most important molecules related to our ecosystem are small molecules. Medium-sized molecules (no more than 100 atoms) tend to be liquids or soft solids at room temperature. They are often long-chain hydrocarbons or lipids. A polymer is a long chain molecule formed by connecting small repeating units with covalent bonds. A network is a type of large structure, usually made from hundreds to billions of atoms, in which each atom is covalently bonded to multiple neighboring atoms, forming a web of connections. Use the empirical formula to describe the simplest ratio of elements of that substance. Use the molecular formula to indicate the exact type and number of each atom in a single molecule of that substance. <u>Intermolecular Forces</u> Intermolecular attractions are also called van der Waals attractions Intermolecular attractions between polar molecules exist on a continuum and can be classified as strong or weak. Hydrogen bonding is strongest, followed by dipole-dipole bonding, and then London dispersion (which is between nonpolar molecules). Molecules that are polar will attract more strongly. Molecules with higher polarity will attract more	List the formulas for two more polyatomic ions.	trials and teacher feedback. 5. Other teacher-made formative assessments – quizzes, quickwrites, observation, graphic organizers, tickets out

Standards Alignment	Unit Concepts	Essential Questions	Assessments
	strongly will have a higher boiling point. Hydrogen bonding plays a crucial role in DNA and protein structures A temporary, very small polarity can be induced when nonpolar molecules are close enough. Molecules with a larger surface area will attract more strongly. Molecules that attract more strongly will have a higher boiling point. <u>Formula Masses</u> By measuring the amount of different elements in a particular substance, we can determine its formula and identify the specific substance. The name of the formula can be used to determine the ratios of elements in the formula. Then the periodic table can be used to get the molar mass (atomic mass) of each of the elements used. You can identify a compound using the percent mass of each element. The empirical formula is the one with the simplest ratio. The empirical formula can be the same as the molecular formula….but not always. The molecular mass will always be equal to, or a multiple of, the empirical formula mass.		

Standards Alignment	Unit Concepts	Essential Questions	Assessments
Unit Nine: Water and Solutions **Timeline: 3 weeks**			

Standard 2: Materials and Their Properties
Strand: Mixtures and Solutions
Substrand A. Properties of solutions, such as pH, solubility, and electrical conductivity depend upon the concentration and interactions of the solute and solvents.
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.
	Enduring Understanding:
	The properties of a mixture are based on the properties of its components.
	
	<u>Solutes, Solvents, and Water</u>
	A true solution is homogeneous on the molecular level.
	
	All solutions contain one solvent and at least one solute.
	
	There is a strong attraction among water molecules due to hydrogen bonding which leads to interesting properties.
	
	In ice, hydrogen bonds force water molecules to align in a crystal structure where molecules are farther apart than they are in a liquid. Surface tension can make a paper clip float on water.
	
	Water is often called the "universal solvent." It dissolves ionic compounds and dissolves many molecular compounds.
	
	Chemical reactions in solids do occur, but they are slow. In liquids chemical reactions occur easily. In gasses they occur quickly.
	
	Polar solvents dissolve polar solutes.
	Nonpolar solvents dissolve nonpolar solutes.
	
	<u>Concentration and Solubility</u>
	There are several ways to express concentration: concentration (g/L) or concentration (%), or concentration (M).
	
	Solubility is the amount of a solute that will dissolve in a particular solvent at a particular temperature and
		Essential Questions:
		How can the properties of the components of a mixture be used to separate the mixture?
		
		How do the components determine the properties of mixtures?
		
		<u>Questions for Inquiry:</u>
		Not everything dissolves in water. Why not?
		
		How do you measure the amount of sugar in a beverage when there is no balance, graduated cylinder or ruler to use?
		
		How can we quickly find the concentration of a solution?
		
		How can we express concentration quantitatively (with numbers)?
		
		How can we construct a calibration curve to help measure solutions of unknown concentration?
		
		How do we measure the energy of a chemical change?
		
		Is energy a product or a reactant?
		
		How much energy is involved?
			Assessment variables explored by the various tools are:
			• Communication skills, Understanding concepts,
			• Organizing scientific ideas, Designing scientific investigations,
			• Recording and organizing scientific data,
			• Analyzing scientific data, Recognizing and evaluating
			• Scientific evidence, understanding quantitative analysis.
			
			Specific Tools:
			1. Questions at the end of each chapter that include:
			  • conceptual questions
			  • multiple choice questions
			  • graphical analysis questions
			  • short answer questions
			  • quantitative problems
			2. Lab investigations have from 3 to 6 formative assessment elements built directly into the investigation.
			3. Examples of average and exemplary student work and scoring examples.
			4. End of chapter test bank also provides a structured assessment tool which is based on extensive classroom trials and teacher feedback.
			5. Other teacher-made

Standards Alignment	Unit Concepts	Essential Questions	Assessments
	pressure. Temperature affects the solubility of solutes (how much) and the rate of solubility (how fast). Dissolving is a collision process. Slow (cold) molecules are not as effective as fast (hot) molecules. The rate of solubility increases with an increase in temperature and with an increase in surface area of the solute. Gases are soluble in liquids. At higher temperatures solid solutes (like salt and sugar) are more soluble gases are less soluble. <u>Properties of Solutions</u> In a solution, higher concentration generally means a faster reaction rate. In a solution, Higher temperature generally means a faster reaction rate. In an exothermic process, energy is released (negative number). In an endothermic process, energy is absorbed (positive number). The density of a solution increases as more solute is added. Colligative property is the physical property of a solution that depends only on the number of dissolved solute particles not on the type (or nature) of the particle itself.		formative assessments – quizzes, quickwrites, observation, graphic organizers, tickets out
Unit Ten: Chemical Reactions **Timeline: 3 weeks**			
Standard 2: Materials and Their Properties	**Enduring Understanding:** There are several ways in which elements and/or	**Essential Question:** What determines the type and	Assessment variables explored by the various tools are:

Standards Alignment	Unit Concepts	Essential Questions	Assessments

Strand: Chemical Reactions
Substrand A. Chemical reactions result in new substances with properties that are different from those of the component parts (reactants).
Substrand 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.
 	
Standard One: Nature and Application of Science and Technology
Strand: Science, Technology and Society
Substrand A. The pursuit of science can generate the need for advanced technology. Advanced technology, in turn, can provide the opportunity to pursue new scientific knowledge.
Substrand B. The social, economic, and political forces of a society have a significant influence on what science and technology programs are pursued, funded, and implemented.
	compounds react to form new substances and each reaction involves energy.
	
	<u>Chemical Equations</u>
	Element symbols are the alphabet of chemistry.
	
	Compound formulas are the words of chemistry.
	
	Chemical equations are the sentences of chemistry.
	
	Law of Conservation of Mass: mass of the products = mass of reactants
	
	When balancing a chemical equation, only coefficients can be changed. Subscripts remain the same.
	
	<u>Methods for Balancing Chemical Equations</u>
	Strategy to balance a chemical equation:
	1. Write down the unbalanced chemical equation.
	2. Identify the element that occurs in only one compound on both sides, and balance it first.
	3. Continue with the rest of the elements. If a free element is present, it is balanced last.
	4. Check each element to make sure that the equation is balanced.
	5. Make sure the coefficients are the smallest possible whole numbers.
	
	<u>Types of Chemical Reactions</u>
	There are four types of chemical reactions:
	1. Synthesis (two compounds combine to make a third compound) / Decomposition (one compound breaks apart into two or more compounds or elements).
	2. Single (Two compounds swap a single element or polyatomic ion
	3.) / Double replacement (Two compounds exchange parts)
	4. Precipitate reaction: An insoluble compound is
		extent of a chemical reaction?
		
		<u>Inquiry Questions:</u>
		Which cup will best hold water? A cup of cardboard, a cup made of salt, or a cup made of glass. Why?
		
		Why are some compounds soluble in water and some not?
		
		How is the formation of a precipitate direct evidence that a chemical reaction has occurred?
		
		When does a chemical reaction occur?
		
		How do we know if a chemical reaction has occurred?
		
		How do you determine a quantity without measuring it directly?
			• Communication skills, Understanding concepts,
			• Organizing scientific ideas, Designing scientific investigations,
			• Recording and organizing scientific data,
			• Analyzing scientific data, Recognizing and evaluating
			• Scientific evidence, understanding quantitative analysis.
			
			Specific Tools:
			1. Questions at the end of each chapter that include:
			  • conceptual questions
			  • multiple choice questions
			  • graphical analysis questions
			  • short answer questions
			  • quantitative problems
			2. Lab investigations have from 3 to 6 formative assessment elements built directly into the investigation.
			3. Examples of average and exemplary student work and scoring examples.
			4. End of chapter test bank also provides a structured assessment tool which is based on extensive classroom trials and teacher feedback.
			5. Other teacher-made formative assessments – quizzes, quickwrites, observation, graphic organizers, tickets out

Standards Alignment	Unit Concepts	Essential Questions	Assessments
	formed 5. Polymerization reaction: A reaction that assembles a polymer through repeated additions of smaller molecular fragments (monomers) <u>Chemical Reactions and Energy</u> A thermochemical equation is an equation that gives the chemical reaction and the energy information of the reaction. Knowing the enthalpies of formation of substances and the following equation, allow you to calculate unknown enthalpy values. Hess's law states that the overall enthalpy of a reaction (1) is the sum of the reaction enthalpies of the various steps into which a reaction can be divided (2).		
Unit Eleven: Stoichiometry **Timeline: 2 weeks**			
Standard Two: Materials and Their Properties **Strand:** Chemical Reactions **Substrand A.** Chemical reactions result in new substances with properties that are different from those of the component parts (reactants). **Substrand C.** The rate of a chemical reaction depends on the properties and concentration of the reactants, temperature, and the presence or absence of a catalyst. **Strand:** Conservation of Matter **Substrand A:** 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.	**Enduring Understanding:** There are several ways in which elements and/or compounds react to form new substances and each reaction involves energy. <u>Analyzing a Chemical Reaction</u> • A chemical equation tells us: • What compounds are involved • How much of each is used • Mole ratios can be determined using coefficients in a balanced equation <u>Percent Yield and Concentration</u> The percent yield tells us how much product has actually obtained, compared to the theoretical value. The mass percent of a compound is the mass of the compound divided by the total mass of the solution times 100.	**Essential Question:** What determines the type and extent of a chemical reaction? <u>Questions for Inquiry:</u> How do you know how much of a chemical is necessary for a reaction to occur? In a given chemical reaction, how much product can we collect compared to the theoretical amount? How can you calculate the molar mass of the reactants and solid product? How can you calculate the number of moles of the	Assessment variables explored by the various tools are: • Communication skills, Understanding concepts, • Organizing scientific ideas, Designing scientific investigations, • Recording and organizing scientific data, • Analyzing scientific data, Recognizing and evaluating • Scientific evidence, understanding quantitative analysis. Specific Tools: 1. Questions at the end of each chapter that include: • conceptual questions • multiple choice

Standards Alignment	Unit Concepts	Essential Questions	Assessments
	Limiting Reactants When one reactant is completely used up, the whole reaction stops. The reactant that is completely used up first is the limiting reactant. If there is some reactant left over when the reaction stops, that reactant is the excess reactant. Solving Stoichiometric Problems Use what we've learned to answer these questions: • What is the limiting reactant? • What is the theoretical yield? • What is the percent yield? • How much excess reactant is left? • How much reactant is used if it's in a solution?	reactants and solid product? How can you determine which reactant was limiting. Support your answer with a calculation?	questions • graphical analysis questions • short answer questions • quantitative problems 2. Lab investigations have from 3 to 6 formative assessment elements built directly into the investigation. 3. Examples of average and exemplary student work and scoring examples. 4. End of chapter test bank also provides a structured assessment tool which is based on extensive classroom trials and teacher feedback. 5. Other teacher-made formative assessments – quizzes, quickwrites, observation, graphic organizers, tickets out
Unit Twelve: Reaction Rates and Equilibrium **Timeline: 2 weeks**			
Standard Two: Materials and Their Properties **Strand:** Chemical reactions **Substrand C**. The rate of a chemical reaction depends on the properties and concentration of the reactants, temperature, and the presence or absence of a catalyst. **Substrand E.** 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.	**Enduring Understanding:** There are several ways in which elements and/or compounds react to form new substances and each reaction involves energy. Reaction Rates Collision Theory: Chemical reactions take place at the molecular level, where molecules of reactants are colliding with each other. Not all collisions are successful. Collision alone does not guarantee success. Factors that affect the reaction rate: • Concentration of reactants: The higher the	**Essential Question:** What determines the type and extent of a chemical reaction? Questions for Inquiry: What is the rate of a reaction and how is it measured? How does temperature affect the ability of living organisms to thrive and grow? Will varying the concentration of reactants affect the reaction rate?	Assessment variables explored by the various tools are: • Communication skills, Understanding concepts, • Organizing scientific ideas, Designing scientific investigations, • Recording and organizing scientific data, • Analyzing scientific data, Recognizing and evaluating • Scientific evidence, understanding quantitative analysis.

Standards Alignment	Unit Concepts	Essential Questions	Assessments
	concentration of reactants, the higher the rate • Temperature: The higher the temperature, the higher the rate • Surface area: The higher the surface area, the higher the rate • Catalysts <u>Chemical Equilibrium</u> Le Châtelier's principle helps to determine where the equilibrium lies when the system undergoes a change in: • Temperature • Concentration • Pressure or volume (for gaseous systems) The equilibrium constant helps to determine where the equilibrium lies: • Large K favors products • Small K favors reactants <u>Chemical Pathways</u> Reaction mechanisms are proposed based on experimental evidence. A series of elementary steps make up the overall reaction. The slowest elementary step is the rate determining step for the overall reaction <u>Catalysts</u> Catalysts are substances that lower the energy barrier. Catalysts are not consumed during the reaction and can be reused. Biological catalysts are called enzymes.	When a chemical equilibrium exists, can we predict which way a chemical reaction will proceed when there is a change in concentration of a reactant? Can a change in the temperature of the surroundings cause one side of a chemical reaction to be favored? How does Le Châtelier's principle explain how the equilibrium of a system can change?	Specific Tools: 1. Questions at the end of each chapter that include: • conceptual questions • multiple choice questions • graphical analysis questions • short answer questions • quantitative problems 2. Lab investigations have from 3 to 6 formative assessment elements built directly into the investigation. 3. Examples of average and exemplary student work and scoring examples. 4. End of chapter test bank also provides a structured assessment tool which is based on extensive classroom trials and teacher feedback. 5. Other teacher-made formative assessments – quizzes, quickwrites, observation, graphic organizers, tickets out
Unit Thirteen: Acids and Bases **Timeline: 3 weeks**			
Standard Two: Materials and Their Properties **Strand:** Chemical Reactions	**Enduring Understanding:** There are several ways in which elements and/or compounds react to form new substances and each	**Essential Question:** What determines the type and extent of a chemical reaction?	Assessment variables explored by the various tools are: • Communication skills,

Standards Alignment	Unit Concepts	Essential Questions	Assessments
Substrand 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. **Strand:** Mixtures and Solutions **Substrand A**. Properties of solutions, such as pH, solubility, and electrical conductivity depend upon the concentration and interactions of the solute and solvents.	reaction involves energy. <u>The Chemical Nature of Acids and Bases</u> The whole subject of acids and bases has to do with the extraordinary chemical power of the H^+ ion, the "naked proton." Arrhenius theory: Acids are chemicals that create H^+ ions in aqueous solutions. Bases are checmicals that produce OH^- ions in aqueous solutions. Bronsted Lowry definition: Acids are chemicals that donate protons. Bases are chemicals that accept protons. A proton that is donated by one chemical (an acid) must be accepted by another chemical (a base). Acids and bases always act in pairs called conjugate acid-base pairs! <u>The pH Scale</u> pH doesn't just tell us if a solution is neutral, an acid or a base. It also tells us: the concentration of H^+ ions in the solution in moles/L which is expressed as a power of 10. You can't measure pH by just looking at a solution, or measuring its density or temperature, but you can measure pH indirectly by – • performing a chemical reaction with a solution of known pH • using a chemical that changes color at different pH values (pH indicators) • measuring the electrical properties of the solution <u>Acid-Base Equilibria</u>	<u>Questions for Inquiry:</u> What makes an acid and acid and a base a base? What does a pH measurement tell us? How can the pH of a solution be calculated from concentration data? How can we determine the pH of a solution using the spectrophotometer? How can we use the technique of titration, to determine an unknown concentration by performing a chemical reaction with a solution of known concentration? What is the equivalence point why does it matter? How can phenolphthalein help us determine acids and bases? How do commercial antacids work? Are some antacids more effective than others? How much vitamin C is in fresh squeezed orange juice? Compared to orange juice, are vitamin C tablets a good source	Understanding concepts, • Organizing scientific ideas, Designing scientific investigations, • Recording and organizing scientific data, • Analyzing scientific data, Recognizing and evaluating • Scientific evidence, understanding quantitative analysis. Specific Tools: 1. Questions at the end of each chapter that include: • conceptual questions • multiple choice questions • graphical analysis questions • short answer questions • quantitative problems 2. Lab investigations have from 3 to 6 formative assessment elements built directly into the investigation. 3. Examples of average and exemplary student work and scoring examples. 4. End of chapter test bank also provides a structured assessment tool which is based on extensive classroom trials and teacher feedback. 5. Other teacher-made formative assessments – quizzes, quickwrites, observation, graphic organizers, tickets out

Standards Alignment	Unit Concepts	Essential Questions	Assessments
	For dilute solutions there is an equilibrium between $[H^+]$ and $[OH^-]$. Use a RICE (Reaction, Initial, Change, Equilibrium) table to find the pH of a weak acid or a weak base. Once $[H^+]$ or $[OH^-]$ has been determined, the pH can be calculated. <u>Acid-Base Reactions</u> Chemical reactions with acids and bases include corrosion, electrolysis, neutralization Neutralization includes: • Salts of weak acids • Salts of strong acids • Titration experiments • Buffers	of vitamin C?	
Unit Fourteen: Gases **Timeline: 2 weeks**			
Standard Two: Materials and Their Properties **Strand:** Properties and Structures of Materials **Substrand I.** Temperature, pressure, and volume are important properties of a gas. A change in two of these properties results in predictable changes in the third. **Standard Three: Energy and Its Effects** **Strand:** The Forms and Sources of Energy **Substrand 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	**Enduring Understanding:** The structures of materials determine their properties. <u>Pressure and Kinetic Theory</u> Gases consist of widely separated atoms or molecules in constant, random motion. Gases have a unique set of physical properties explained by kinetic molecular theory. 1. Gases are translucent or transparent. 2. Gases have very low densities when compared to liquids or solids. 3. Gases are highly compressible compared to liquids and solids. 4. Gases can expand or contract to fill any container. The basis of kinetic molecular theory, which explains gas behavior because • No interaction between atoms or molecules,	**Essential Question:** Why are temperature, pressure and volume important properties of a gas? <u>Questions for Inquiry:</u> How can we determine the molar mass of a gas? Can we measure the volume of a gas using a graduated cylinder? Wouldn't the gas escape? Is an empty container really empty? If air is matter (just like a liquid or a solid) then shouldn't it have mass? How much mass?	Assessment variables explored by the various tools are: • Communication skills, Understanding concepts, • Organizing scientific ideas, Designing scientific investigations, • Recording and organizing scientific data, • Analyzing scientific data, Recognizing and evaluating • Scientific evidence, understanding quantitative analysis. Specific Tools: 1. Questions at the end of each chapter that include: • conceptual questions • multiple choice

Standards Alignment	Unit Concepts	Essential Questions	Assessments
under the influence of gravity, elastic forces or electric forces and its potential energy can be determined from its position. **Substrand** D. Thermal (heat) energy is associated with the random kinetic energy of the molecules of a substance.	except during collisions. • Straight trajectory until a collision occurs. Pressure increases when: • the temperature (speed of molecules) increases. • the density (number of molecules) increases. The energy of molecules only depends on temperature therefore, heavier molecules move slower. Diffusion is the slow spreading of one type of molecules within another type. <u>The Gas Laws</u> Because gases can expand and contract they behave differently from solid and liquids. Gas pressure is increased by more frequent and/or harder collisions. Gas pressure is affected by changing the 1. Density: More molecules means more impacts and a higher pressure. 2. Volume of the container: With less space to move around, there are more collisions and a higher pressure. 3. Temperature: With more kinetic energy, the molecules move faster. The collisions are harder and more frequent. Boyle's Law, and Charles's Law are combined to create the combined gas law. Avogardro's Law contributes with the combined gas law to create the ideal gas law. The ideal gas law is an approximation which is accurate for many gases over a wide range of conditions. The ideal gas law is not accurate at very high density or at very low temperature.	Liquids and solids have densities. What is the density of air?	questions • graphical analysis questions • short answer questions • quantitative problems 2. Lab investigations have from 3 to 6 formative assessment elements built directly into the investigation. 3. Examples of average and exemplary student work and scoring examples. 4. End of chapter test bank also provides a structured assessment tool which is based on extensive classroom trials and teacher feedback. 5. Other teacher-made formative assessments – quizzes, quickwrites, observation, graphic organizers, tickets out

Standards Alignment	Unit Concepts	Essential Questions	Assessments
	Stoichiometry and Gases Steps for solving stoichiometry problems for gases and solids, solutions, and other gases.		

MEMORANDUM OF UNDERSTANDING
THE SOCIAL STUDIES COALITION OF DELAWARE

PURPOSE OF THIS MEMO

This memorandum of understanding will define the roles and responsibilities of each party in the Social Studies Coalition of Delaware (SSCD). This coalition is a partnership with the purpose to improve the teaching and learning of K-12 social studies in Delaware public schools and to help all Delaware public school students reach the Delaware Social Studies Standards.

The partnership includes the Department of Education, public school districts throughout the state, charter schools, and other agencies involved in standards-based instruction and assessment (Center for Economic Education and Entrepreneurship, Delaware Geography Alliance, Delaware Social Studies Education Project, Democracy Project and State Archives). The partnership is open to all public school entities, including vocational/technology schools and charter schools, that agree to collaborate in the systemic improvement of their K-12 social studies programs as outlined in this memorandum.

This Memorandum of Understanding (MoU) defines the conditions under which the Coalition will be financed, principles for operation and the collaborative processes as established by the Coalition. The MoU can be modified at any time by majority agreement of voting members of the Steering Committee.

MISSION

The Coalition exists to support the creation of the highest quality social studies instruction for the K-12 students in Delaware. The goals of the SSCD are to:

- Assist districts in the development of assessments to guide social studies curriculum development and instruction at the district level.
- Continue the development and alignment of social studies curriculum and instructional materials by designing model lessons for each benchmark to be distributed to members of the Coalition.
- Provide staff development for curriculum development and instructional delivery.
- Provide leadership and an organizational structure to facilitate planning, assist with the development of instructional materials and coordinate the delivery of the items listed above.

GUIDING PRINCIPLES

- The purpose of the partnership is to support continuous standards-based reform of social studies education in Delaware schools.
- Adoption and implementation of curricula is the responsibility of individual school systems. The Coalition is established to assist them in this endeavor and to provide cost effective standards-based education programs.
- Costs will be shared in a way that all parties benefit as equally as possible. Every effort will be made to provide services in support of the program at cost. Member districts and charter schools will pay $2000 by Sept. 30, 2012 to support Coalition actions beginning July 1, 2012 through June 30, 2013 for professional development, development of products and other activities. Thereafter, annual fees will be determined by the Board.
- Professional development will be provided by the Coalition. Individual districts/charter schools will provide additional support for the participants.
- The Coalition will seek to coordinate financial support from foundations, affiliates and others for implementation of standards-based social studies education for Delaware students.

G0VERNANCE OF THE COALITION

The Coalition will be directed by the Board that includes voting and non-voting members. Voting members shall include a representative from each member school district and charter school that has paid its annual fee. Non-voting members shall include two representatives from the Department of Education, affiliate members including the Center for Economic Education and Entrepreneurship, the Delaware Geographic Alliance, the Delaware Social Studies Education Project and the Democracy Project as well as future affiliate members.

The purpose of the Board is to:

- Establish and approve operating policies and practices for the Coalition.
- Set and approve the annual budget for the Coalition and monitor expenditures. The Milford School District has agreed to act as the fiscal agent at no cost, and for this will receive a reduced membership fee for the 2012-2013 school year.
- Establish and implement an effective communications program.
- Take a leadership role in developing and overseeing a strategic plan for K-12 social studies education in Delaware.
- Promote partnerships among the K-12 public schools, higher education and the business community.

Coalition Leadership – SSCD leadership shall be administered by an Executive Committee and directed by the Board. An Executive Secretary and two chairpersons shall be elected by the voting members of the Steering Committee to a two year, staggered term without remuneration and will coordinate the Coalition's activities and chair meetings. Additionally, the Executive Committee shall consist of two non-voting members from the Department of Education as well as one representative from each of the three counties who are approved by the Board.

The Board will establish sub-committees to manage specific aspects of the Coalition. These committees will be defined as the Coalition membership is firmly established. Meetings of the Coalition's Executive committee and Board will be held on a monthly basis.

Signatures of Agreement – 2012 - 2013

SSCD Representative Date

Superintendent –S.D./Charter Date 12/5/12

School District/Charter School name The Delaware Met High School (proposed opening – Fall 2014)

Nash Childs, Board Chair 1300 North Grant Avenue #110 Wilmington, DE 19806 (302) 655-3434

November 19, 2012

Mr. Preston Shockley
Education Associate for Social Studies
Delaware Department of Education
John G. Townsend Building
401 Federal Street, Suite 2
Dover, DE 19901

Dear Mr. Shockley:

The Founding Board of The Delaware Met High School is submitting a charter school application to open a high school in the fall of 2014 in Wilmington, DE. It is the intention of the Founding Board that the school will join the Social Studies Coalition when it opens. The teachers will use the Social Studies Coalition developed units of instruction for grades 9-12, attend training as required, and fully implement social studies instruction as guided by the Social Studies Coalition and Delaware Social Studies Standards.

Sincerely,

Nash Childs
Founding Board Chair

Curriculum Framework for Civics & Citizenship

School: Delaware Met____ **Curricular Tool: History Alive___** **Grade: 9** **Teacher _____**

Standards Alignment	Unit Concept/Big Ideas	Essential Questions/Student Learning Targets	Assessments
Unit One: Power, Authority, and Government- Timeline : 2 weeks			
Civics Standard 1: Students will examine the structure and purposes of governments with specific emphasis on constitutional democracy [Government].	Constitutional democracy as a structure of government developed from the tension between the need for authority and the need to constrain authority. 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. The American ideals that people should rule themselves and that government should protect human rights are clearly set forth in the Declaration of Independence.	**Essential Questions:** Why should you care about power, politics, and government? How should political and economic power be distributed in a society? **Learning Targets:** • Students will be able to describe the rationale for government. • Students will be able to understand the relationship between power and government. • Students will be able to describe politics and political activity. • Students will be able to describe the origins and evolution of government. • Students will be able to understand the distribution of power in today's governments.	**Suggested Formative Assessments:** Main idea activities Vocabulary activities Quiz game Exit Tickets Collaborative projects Critical thinking and extension activities Participation in oral class discussions Exhibitions Digital portfolios Narratives **Suggested Summative Assessment:** Daily quizzes Chapter assessment Unit assessment
Unit Two: Delaware Model Unit- Dams Timeline: 2 weeks			
Geography Standard 2: 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	The human response to the characteristics of a physical environment comes with consequences for both the human culture and the physical environment.	**Essential Questions:** How can people predict the consequences from human alterations to the physical environment? How does human perception of the	**Culminating assessment associated with Delaware Model Unit** ***Problem- The World Commission on Dams, a commission created by the World Bank, has been asked to review some major dam projects from around the

local to global scales.		environment affect human modification of the environment? What can be learned from human modification to the environment? **Learning Targets:** • Students will be able to describe the environmental impact humans have on our society. • Students will understand how the human-environmental interaction affects government.	world. The Kariba Dam on the Zambezi River is the focus of one of the case studies and will be reviewed for the social, economic, and environmental costs and benefits. The commission plans to investigate the pros and cons of building the Kariba Dam. Click here for a Resource Article about the Kariba Dam project. *****Product-** Submit your findings in a written report that provides: •An overview of the economic, cultural, and environmental advantages and disadvantages of building this dam •An evaluation of the cost, benefits, and impacts of building this dam •A recommendation regarding if this was an effective project given today's views
Unit Three: Foundations of the American Government- **Timeline: 2 weeks**			
Civics Standard 1: Students will examine the structure and purposes of governments with specific emphasis on constitutional democracy [Government]. **Civics Standard 2:** Students will understand the principles and ideals underlying the American political system [Politics]. **Civics Standard 3**: Students will understand the responsibilities, rights, and privileges of United States citizens [Citizenship].	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. The American ideals that people should rule themselves and that government should protect human rights are clearly set forth in the Declaration of Independence. 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.	**Essential Questions:** What ideas gave birth to the world's first modern democratic nation? How and why did the framers distribute power in the Constitution? How are your rights defined and protected under the Constitution? How does power flow through our federal system of government? **Learning Targets:** • Students will the importance of freedom to all Americans. • Students will demonstrate knowledge of how governments	**Suggested Formative Assessments:** Main idea activities Vocabulary activities Quiz game Exit Tickets Collaborative projects Critical thinking and extension activities Participation in oral class discussions Exhibitions Digital portfolios Narratives **Suggested Summative Assessment:** Daily quizzes Chapter assessment Unit assessment

		affect the lives of their citizens.	
Unite Four: Delaware Model Unit- Project Citizen integrated into this unit **Timeline: 2 weeks**			
Civics Standard 4a: Students will develop and employ the civic skills necessary for effective, participatory citizenship [Participation]. **Civics Standard 4b**: Students will understand the process of working within a political party, a commission engaged in examining public policy, or a citizen's group.	Effective citizens can research issues, form reasoned opinions, support their positions, and engage in the political process. Effective governance requires responsible participation from diverse individuals who translate beliefs and ideas into lawful action and policy.	**Essential Questions:** How should private citizens and interest groups most effectively communicate with government programs and agencies? How do stakeholders work with government to influence policy? How should a citizen communicate with a government agency to influence the decisions of that agency? How should groups engaged in political activities organize to accomplish their goals? How does one get involved with a political party? How does one get heard by a commission examining public policy? What is a citizens' group and how do they operate? **Learning Targets:** • Students will be able to describe the principal economic,	**Culminating assessment associated with Delaware Model Unit** *****Problem -**Many teens throughout the U.S. do not feel that they have a voice in public policy decision making. You were asked by the National Council for Civic Education to lead your state in marketing their new campaign to convince teens that they need to participate in local, state, and/or national public policy decision making by either communicating with government programs and agencies, working within a political party, or joining a citizen's group. *****Product/Performance -** You are responsible for creating a state marketing product for the national campaign. The marketing product may take the form of a radio announcement, a poster, a television advertisement, or other appropriate format. (If a television ad is chosen you may use a storyboard to outline the ad rather than producing an actual video.) Regardless of the format, each product should include the following: ✓ A slogan to persuade fellow teens that they should participate in public policy decision making.

		technological, and cultural effects the United States has had on the world. • Students will know why it is important to be an active participant in public policy decision making. • Students will understand how different stakeholders work with government to influence public policy. • Students will be able to describe how a government commission examines public policy issues. • Students will understand how lobbyists and citizens groups can affect public policy making efforts. • Students will be able to identify public policy issues in their community. • Students will be able to implement research strategies to effectively gather information on a particular public policy issue. • Students will be able to effectively communicate with government programs and agencies.	✓ An explanation of public policy decisions that affect a variety of stakeholders, including U.S. teens. ✓ At least three ways that teens can participate in public policy decision making. ✓ An example of at least one effective way that teens can communicate with government programs and agencies with an explanation of why that method would be effective. ✓ An explanation of how a group can be organized to accomplish the goal of affecting public policy with supporting reasoning.
Unit Five: Political Participation and Behavior **Timeline: 2 weeks**			
Civics Standard 1: Students will examine the structure and purposes of governments with specific emphasis on constitutional democracy [Government].	Effective citizens are committed to protecting rights for themselves, other citizens, and future generations by upholding their civic responsibilities and are aware of the potential consequences of inaction.	**Essential Questions:** How can you make a difference in a democracy? Political parties and interest groups: How do they influence our political decisions?	**Suggested Formative Assessments:** Main idea activities Vocabulary activities Quiz game Exit Tickets Collaborative projects Critical thinking and extension activities

Civics Standard 2: Students will understand the principles and ideals underlying the American political system [Politics]. **Civics Standard 3**: Students will understand the responsibilities, rights, and privileges of United States citizens [Citizenship]. **Civics Standard 4**: Students will develop and employ the civic skills necessary for effective, participatory citizenship [Participation].	Effective governance requires responsible participation from diverse individuals who translate beliefs and ideas into lawful action and policy. Effective citizens should research issues, form reasoned opinions, support their positions, and engage in the political process, while recognizing the bias of socialization and the media. Being an informed citizen and voter is critical to political engagement in and a healthy democracy.	To what extent do the media influence your political views? Elections and voting: why should they matter to you? What are the consequences of citizens not participating in democracy? Why is it important for citizens to become informed about candidates and stay informed after the election? Why should citizens attempt to influence elected officials? **Learning Targets:** • Students will be able to explain the meaning and importance of respect for the rights and choices of individuals. • Students will be able to explain the important factors that have helped shaped American society, such as universal public education. • Students will be able to explain the meaning and importance of self-discipline and self-governance. • Students will be able to explain the idea that citizenship confers certain rights and privileges. • Students will be able to explain how the individual's rights to life, liberty, and property are protected.	Participation in oral class discussions Exhibitions Digital portfolios Narratives **Suggested Summative Assessment:** Daily quizzes Chapter assessment Unit assessment

Unit Six: Delaware Model Unit – Responsibilities of Citizenships **Timeline: 2 weeks**			
Civics Standard 3: Students will understand the responsibilities, rights, and privileges of United States citizens [Citizenship].	Effective citizens are committed to protecting rights for themselves, other citizens, and future generations by upholding their civic responsibilities and are aware of the potential consequences of inaction.	**Essential Questions:** Why is it important for citizens to become informed about candidates and stay informed after the election? Why should citizens attempt to influence elected officials? Why do special interest groups play an important role in American citizens influencing their elected officials? **Learning Targets:** • Students will be able to describe why citizens are individually responsible for keeping themselves informed about public policy issues on the local, state, and federal levels. • Students will be able to describe why participating in the civic process is important. • Students will be able to describe why upholding the laws of the land is important. • Students will be able to analyze a political cartoon. • Students will be able to adapt to varied roles and responsibilities. • Students will be able to act responsibly with the interests of the larger community in mind. • Students will be able to demonstrate ethical behavior in personal, workplace, and community contexts.	**Culminating assessment associated with the Delaware Model Unit.** *****Problem** -A high percentage of citizens does not stay informed, does not participate in the civic process (such as voting), and fails to uphold the laws of the land. *****Product/Performance**- Have students work in small groups to collect data regarding how citizens fulfill their responsibilities of citizenship. Each student should survey 25 people (at least one-half over the age of 18). This survey might include questions such as the following: •To what degree do you take the time to learn about candidates running for office? •Who are our two senators and representative? (Can the person accurately record the three names?) •To what degree do you stay informed about public policy issues? •Are you a member of a special interest group (e.g., NRA, Greenpeace, MADD, etc.)? •To what degree do you obey the law? •Have you ever reported on someone breaking the law? •For those participants over the age of 18, are you registered to vote? •For those participants over the age of 18, did you vote in the last presidential election? •For those participants over the age of 18, did you vote in the last school board election?

			•For those participants over the age of 18 and at some point summoned for jury duty, did you serve or did you request an excuse from service? After the survey results are calculated, the storyboard should focus on persuading citizens to be more active and fulfill their civic responsibilities. Each storyboard page will focus on a different statistic and the consequences of the statistic. Overall, are people fulfilling this civic responsibility or not? If not, what could be done to increase this statistic?
Unit Seven: The Branches of Government **Timeline: 2 weeks**			
Civics Standard 1: Students will examine the structure and purposes of governments with specific emphasis on constitutional democracy [Government]. **Civics Standard 2**: Students will understand the principles and ideals underlying the American political system [Politics]. **Civics Standard 3**: Students will understand the responsibilities, rights, and privileges of United States citizens [Citizenship].	The federal system of the United States allows state governments to serve the needs of their citizens while cooperating as a united country. A state's executive branch, led by the governor, carries out laws made by the state's legislative branch. State court systems include lower courts, general trial courts, appeals courts and state supreme courts. As Americans settled in rural communities, towns and cities and suburbs, they set up local governments. The large population of cities creates many challenges for city government. You live under three levels of	**Essential Questions:** What makes an effective legislator? How do laws really get made? What qualities do modern presidents need to fulfill their many roles? Does the federal government budget and spend your tax dollars wisely? How is the US judicial system organized to ensure justice? From doing the crime to doing time: How just is our criminal justice system? **Learning Targets:** • Students will be able to defend positions on the contemporary role of organized groups in	**Suggested Formative Assessments:** Main idea activities Vocabulary activities Quiz game Exit Tickets Collaborative projects Critical thinking and extension activities Participation in oral class discussions Exhibitions Digital portfolios Narratives **Suggested Summative Assessment:** Daily quizzes Chapter assessment Unit assessment

	government- local, states, and federal- that all cooperate with each other.	American social and political world. • Students will be able to describe the purpose, organization, and functions of the three branches of national government. • 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.	
Unit Eight: Delaware Model Unit- Regional Planning will be taught during this unit **Timeline: 18 weeks**			
Geography Standard 1- Students will develop a personal geographic framework, or "mental map," and understand the uses of maps and other geo-graphics [MAPS]. **Geography Standard 1a:** 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 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) -- Complementarity (the mutual exchange of people or goods among places usually occurs over	Mapping the locations of health-related facilities reveals a pattern that applies in commercial, industrial and service facilities. Students explore the efficiencies that result from complementarity. Planners understand the effect of geographic settlement hierarchies. Students study demographic and transportation patterns and suggest the best location for a new facility. Diffusion is predictable. Planners may wish to slow the spread of disease, of invasive species, or of pollutants. Or they may work to speed the spread of information or innovation.	**Essential Questions:** Who plans for land use? Why are land use plans put into place? What geographic principles and tools are used by planners in local communities? How is competition or interaction between places influenced by their relative location and accessibility? How might the position of a place in a settlement hierarchy affect the life of the people in that place? How can diffusion patterns be used to understand, manage and predict movement over time? How can the actions of humans impact the balance of physical systems? How can governments around the world balance economic	**Suggested Formative Assessments:** Main idea activities Vocabulary activities Quiz game Exit Tickets Collaborative projects Critical thinking and extension activities Participation in oral class discussions Exhibitions Digital portfolios Narratives **Suggested Summative Assessment:** Daily quizzes Chapter assessment Unit assessment *****Transfer Task and Culminating Project associated with the Delaware Model Unit** Students select a problem for this demonstration of geographic knowledge and skill. A menu of suggested case studies may be provided by the teacher, or the students may propose a topic for

the shortest possible distances) **Geography Standard 1b:** Students will apply the analysis of mapped patterns to the solution of problems. **Geography Standard 2:** 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. **Geography Standard 3:** Students will understand the processes which result in distinctive cultures, economic activity, and settlement form in particular locations across the world. **Geography Standard 4:** Students will apply knowledge of the types of regions and methods of drawing boundaries to interpret the Earth's changing complexity.		development and environmental concerns? How can individual citizens and citizen groups solve community environmental and social problems? How can citizens affect comprehensive community planning decisions? **<u>Learning Targets:</u>** • Students will be able to consider causes, effects and possible solutions for variations in emergency response times across the state. • Students will be able to compare existing Land Use Patterns and Plans. Local communities are compared with communities in other parts of the US and the world. • Students will be able to describe the factors that the affect quality of life in a neighborhood, town, or region.	teacher approval. The students will: • Describe the problem in geographic terms; • Gather, organize and analyze data; • Suggest a solution to the problem that is at least partly geographic.

Curriculum Framework for Enhanced Economics

School: Delaware Met **Curricular Tool: History Alive** **Grade or Course: 10** **Teacher _____**

Standards Alignment	Unit Concept/Big Ideas	Essential Questions/Student Learning Targets	Assessments
Unit One: Economic Fundamentals **Timeline : 5 weeks**			
Economics Standard 1: Students will analyze the potential costs and benefits of personal economic choices in a market economy [Microeconomics]. **1a**-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. **Economics Standard 2**: Students will examine the interaction of individuals, families, communities, businesses, and governments in a market economy [Macroeconomics]. **2a**: 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. **Economics Standard 3**: Students will understand different types of economic systems and how they change [Economic systems].	Goods, services, and resources in a market economy are allocated based on the choices of consumers and producers. Due to scarcity, individuals, families, communities, and societies as a whole, must make choices in their activities and consumption of goods and services. Because resources are scarce, societies must organize the production, distribution and allocation of goods and services. Because of interdependence, decisions made by consumers, producers, and government impact a nation's standard of living.	**Essential Questions:** How can you think like an economist? Why can't you always get what you want? Who or what decides what you get? How does trade make people better off? **Learning Targets:** Students will investigate the tools and principals economists use to make sense of the world. Students will examine how scarcity requires people to make decisions that involve tradeoffs and opportunity costs. Students will learn about traditional, command, market, and mixed economies, as well as the characteristics of the American free enterprise system. Students examine how individuals and groups benefit when they specialize in producing and trading the goods for which they hold a comparative advantage.	**Suggested Formative Assessments:** Main idea activities Vocabulary activities Quiz game Alternative assessment handbook Test practice handbook Critical thinking and extension activities Participation in oral class discussions Exhibitions Portfolios Exit Tickets Narrative assessments Weekly Individual write-ups Reflective journals Mentor Evaluations **Suggested Summative Assessment:** Chapter assessment Unit assessment

Standards Alignment	Unit Concept/Big Ideas	Essential Questions/Student Learning Targets	Assessments
3a: Students will analyze the wide range of opportunities and consequences resulting from the current transitions from command to market economies in many countries.			
Unit Two: How Markets Work **Timeline: 5 weeks**			
Economics Standard 1: Students will analyze the potential costs and benefits of personal economic choices in a market economy [Microeconomics]. **1a**-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. **Economics Standard 2**: Students will examine the interaction of individuals, families, communities, businesses, and governments in a market economy [Macroeconomics]. **2a**: 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.	Individuals, businesses, and governments must make choices when consuming and producing goods and services because the resources available to satisfy wants are limited. The "right" price is not only influenced by supply and demand, but also by an individual's values and perspective. Because of interdependence, decisions made by consumers, producers, and government impact a nation's standard of living.	**Essential Questions:** What are demand and supply, and what factors influence them? How do you know when the price is "right"? What happens when markets do not work perfectly? **Learning Targets:** Students will learn about market demand and supply and are introduced to market curves and the concept of elasticity. Students will experience how demand and supply determine price in a competitive market. Students will identify and apply the characteristics of market structures – perfect competition, monopoly, oligopoly, and monopolistic competition – to industry case studies.	**Suggested Formative Assessments:** Main idea activities Vocabulary activities Quiz game Alternative assessment handbook Test practice handbook Critical thinking and extension activities Participation in oral class discussions Exhibitions Portfolios Exit Tickets Narrative assessments Weekly Individual write-ups Reflective journals Mentor Evaluations **Suggested Summative Assessment:** Chapter assessment Unit assessment

Standards Alignment	Unit Concept/Big Ideas	Essential Questions/Student Learning Targets	Assessments
Unit Three: Delaware Model Unit- Economic Stability **Timeline: 10 weeks**			
Economics Standard 2: Students will examine the interaction of individuals, families, communities, businesses, and governments in a market economy [Macroeconomics]. **2a**: 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.	A nation's overall level of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government, and trading partners. Because of interdependence, decisions made by consumers, producers, and government impact a nation's standard of living. Market economies are dependent on the creation and use of money, and a monetary system to facilitate exchange. Economic instability affects the choices made by households, businesses, and government.	**Essential Questions:** Why is our economy interdependent? How can we determine the overall health of the economy? Why are market economies dependent on the creation and use of money and a monetary system to facilitate exchange? How might government policy decisions affect the stability of the economy? How do Federal Reserve decisions affect the stability of the economy? How does fiscal policy affect the stability of the economy? **Learning Targets:** Students will be able to analyze the effects of an event on the economy as a whole. Students will be able to analyze economic statistics and determine the health of the economy. Students will be able to explain how the Federal Reserve controls the money supply in order to achieve economic stability. Students will be able to explain how Congress and the President use taxing	**Culminating assessments associated with Delaware Model Unit.** ***Problem- The board of directors for an American manufacturing company wants to understand how the economy has affected company profits over the past 10 years and make predictions for the future. ****Product/ Performance-** As an economic adviser, it is your responsibility to research the last 10 years of economic conditions and present your findings to the board of directors. In this presentation you must include the following content: •An overview of the trends over the last 10 years up to present day for each economic indicator (GDP, GDP per capita, inflation, unemployment, retail sales, and housing starts, and any other indicators that might affect the company you have selected) •An explanation of how these trends reflected conditions in the overall economy including any changes in the business cycle over that 10-year time period •A prediction of how the economic conditions would most likely affect an automobile manufacturer, either positively or negatively •Recommendations about what their company could do to maximize future sales considering the current economic

Standards Alignment	Unit Concept/Big Ideas	Essential Questions/Student Learning Targets	Assessments
		and spending to achieve economic stability Students will be able to recommend monetary and fiscal policy actions	statistics **Problem-** The country is facing an economic crisis described by the following economic statistics: • Unemployment Rate: ____ • Inflation Rate: _____ • GDP: _____ *****Product/ Performance**- As a member of the Federal Reserve, you will be expected to present your recommendations to stabilize the national economy. In this simulation you must: •Introduce yourself to the group by sharing your biographical sketch. •Complete your entrance ticket prior to the simulation which asks you to: □Determine what phase the business cycle is in by evaluating the economic indicators □Predict how the current economic condition is affecting the average American citizen □Develop a plan to stabilize the economy using the appropriate monetary tool(s) •As a group, write a statement explaining the monetary tool(s) used and an explanation of why those tools were used •Complete an exit ticket after the simulation which asks you to reflect on your original thoughts. Based on discussion from the simulation you will: □Determine what phase the business

Standards Alignment	Unit Concept/Big Ideas	Essential Questions/Student Learning Targets	Assessments
			cycle is in by evaluating the economic indicators Predict how the current economic condition is affecting the average American citizen Your presentation could take the form of a PowerPoint presentation, a presentation using posters and/or handouts, or a video.
Unit Four: Economic Institutions and the Public Sector **Timeline: 5 weeks**			
Economics Standard 2: Students will examine the interaction of individuals, families, communities, businesses, and governments in a market economy [Macroeconomics]. **2a**: 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. **Economics Standard 3**: Students will understand different types of economic systems and how they change [Economic systems]. **3a:** Students will analyze the wide range of opportunities and consequences resulting from the current transitions from command to market economies in many countries.	A person's spending is affected by the health of the economy, and the positioning of spending within the business cycle. Investing in human capital makes a person's labor more valuable and can increase the person's standard of living. Because resources are scarce, societies must organize the production, distribution, and allocation of goods and services. The choices and decisions for every economy are based on the goals of efficiency, equity, freedom, growth, security, and stability; to meet these goals with limited resources means trade-offs must be made.	**Essential Questions:** How should you spend, save, and invest your money? Why is it important to invest in your human capital? How should the U.S. government carry out its economic roles? Who and what should be taxed? **Learning Targets:** Students will explore the financial intuitions related to spending, saving, and investing. Students will examine trends in today's labor market, factors that influence wages, and the importance of investing in human capital. Students will identify and evaluate the economic roles of the United States	**Suggested Formative Assessments:** Main idea activities Vocabulary activities Quiz game Alternative assessment handbook Test practice handbook Critical thinking and extension activities Participation in oral class discussions Exhibitions Portfolios Exit Tickets Narrative assessments Weekly Individual write-ups Reflective journals Mentor Evaluations **Suggested Summative Assessment:** Chapter assessment Unit assessment

Standards Alignment	Unit Concept/Big Ideas	Essential Questions/Student Learning Targets	Assessments
		government. Students will examine types of tax bases and structures to evaluate who and what should be taxed.	
Unit Five: Measuring and Managing the Economy in a Global Society **Timeline: 5 weeks**			
Economics Standard 2: Students will examine the interaction of individuals, families, communities, businesses, and governments in a market economy [Macroeconomics]. **2a**: 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. **Economics Standard 3**: Students will understand different types of economic systems and how they change [Economic systems]. **3a:** Students will analyze the wide range of opportunities and consequences resulting from the current transitions from command to market economies in many countries.	A nation's overall level of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government, and trading partners. Because of interdependence, decisions made by consumers, producers, and government impact a nation's standard of living. Market economies are dependent on the creation and use of money, and a monetary system to facilitate exchange. Economic instability affects the choices made by households, businesses, and government. Nations agree to trade when all parties expect to gain. A nation's standard of living is related to its trading patterns. Changes in trading patterns affect distribution of income and quality of life globally.	**<u>Essential Questions:</u>** How can economic stability be achieved? Why is our economy interdependent? How can we determine the overall health of the economy? Why are market economies dependent on the creation and use of money and a monetary system to facilitate exchange? How and why do nations conduct trade in the global economy? Are the benefits of globalization worth the costs? To what extent should nations trade with less developed nations? **<u>Learning Targets:</u>** Students will learn about the key economic indicators – gross domestic product, unemployment rate, and inflation rate – used to measure economic health. Students will learn how the fiscal policies of the president and Congress and the monetary policies of the Federal	**<u>Suggested Formative Assessments:</u>** Main idea activities Vocabulary activities Quiz game Alternative assessment handbook Test practice handbook Critical thinking and extension activities Participation in oral class discussions Exhibitions Portfolios Exit Tickets Narrative assessments Weekly Individual write-ups Reflective journals Mentor Evaluations **<u>Suggested Summative Assessment:</u>** Chapter assessment Unit assessment

Standards Alignment	Unit Concept/Big Ideas	Essential Questions/Student Learning Targets	Assessments
	Government actions that promote competition and free trade among people and nations increase the health of an economy and the welfare of nations.	Reserve are used to stabilize the U.S. economy. Students will examine why and how countries trade and evaluate the impact of trade barriers on the global economy. Students will examine the costs and benefits of an increasingly global marketplace.	
Unit Six: Personal Finance **Timeline: 6 weeks**			
Personal Finance Standard 1: [Financial Planning and Decision-Making] **9-12a:** Students will apply problem-solving strategies and cost benefit analysis to assess the consequences of financial decisions. **9-12b**: Students will create an overall financial plan for spending and saving in order to achieve personal goals. **Personal Finance Standard 2**: [Money Management] **9-12a:** Students will analyze the benefits and costs of various payment options while applying the mechanics of money management. **9-12b:** Students will examine how	An individual's goals affect how they value the benefits and costs of alternative choices. A financial plan is a strategy to accomplish an individual's or household's financial goals that will change as an individual's or household's situation changes. Effective financial plans incorporate the possibility of unexpected expenditures. <u>Employment:</u> Salary Commissions Deductions <u>Managing a bank account:</u> Using checks Writing checks Maintaining a checkbook register Reconciliation of the checkbook register	**<u>Essential Questions:</u>** What are the differences between short-term and long-term goals? How might your personal financial goals affect your family and others? What are the major differences between the way earnings are computed for salaried employees and for hourly employees? What is the difference between gross pay and net pay? Why do people use checks for money transactions? Why is it necessary to reconcile with each monthly bank statement? Why would a less liquid account earn higher interest than a more liquid account?	**<u>Suggested Formative Assessments:</u>** Main idea activities Vocabulary activities Quiz game Alternative assessment handbook Test practice handbook Critical thinking and extension activities Participation in oral class discussions Exhibitions Portfolios Exit Tickets Narrative assessments Weekly Individual write-ups Reflective journals Mentor Evaluations **<u>Suggested Summative Assessment:</u>** Chapter assessment Unit assessment Personal finance plan Balanced checking accounts

Standards Alignment	Unit Concept/Big Ideas	Essential Questions/Student Learning Targets	Assessments
ability to pay and personal credit history influences an individual's financial opportunities and choices. **Personal Finance Standard 3**: [Saving and Investing] **9-12a:** Students will demonstrate that personal savings and investment compound over time and contribute to meeting financial goals. **9-12b:** Students will evaluate the costs and benefits of major savings and investing options. **Personal Finance Standard 4**: [Risk Protection] **9-12a:** Students will understand how to evaluate financial products and services to minimize financial risks. **9-12b:** Students will analyze how state and federal laws and regulations protect consumers.	Savings Different types of bank accounts Interest/ Compound interest <u>Credit:</u> Nature of credit Functions of credit Monthly payments Borrowing money Managing credit Problems with credit Advantages vs. disadvantages of credit cards Credit ratings/ Credit score <u>Investments:</u> Home ownership Mortgages, down payment, points, and closing costs Home loans <u>Taxes:</u> Federal and State income tax Completing income taxes	How does the use of credit raise the standard of living? What are ways to reduce the cost of an installment loan? Why is it important to be a responsible consumer when using credit cards? In which situations is it advantageous to have a high credit score? Why is it important not to share your social security number with others? **<u>Learning Targets:</u>** Students will compute the earnings from a part-time job and a full-time job. Students will compare an hourly wage with a weekly or monthly salary. Students will determine how much a person earns when his or her pay is based on a commission. Students will calculate take-home pay by subtracting deductions from gross pay. Students will understand different types of bank and checking accounts. Students will write checks and deposits slips, and endorse checks properly. Students will calculate the interest and bank charges for a checking account.	

Standards Alignment	Unit Concept/Big Ideas	Essential Questions/Student Learning Targets	Assessments
		Students will reconcile a bank statement with the corresponding check register balance. Students will explain factors such as interest rates and liquidity that influence the return money can earn at financial institutions. Students will explain the difference between regular savings accounts, money market accounts, and certificates of deposit. Students will compute interest in a savings account using the compound interest formula. Students will calculate monthly payments on a loan and the total payment on a loan. Students will compute the interest due, note reduction, and unpaid balance on a loan on a monthly basis. Students will understand the relationship between APR and interest charges. Students will calculate credit account interest, payments, and balances. Students will compare the tax owed with the amount withheld by the employer.	

Curriculum Framework for U.S. History

School: Delaware Met **Curricular Tool: History Alive** **Grade or Course: 11** **Teacher _____**

Standards Alignment	Unit Concept/Big Ideas	Essential Questions/Student Learning Targets	Assessments
Unit One: Introduction: Setting the Stage **Timeline : 3 weeks**			
History Standard 1: Students will employ chronological concepts in analyzing historical phenomena [Chronology]. **1a:** 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. **History Standard 2**: Students will gather, examine, and analyze historical data [Analysis]. **2a:** Students will develop and implement effective research strategies for investigating a given historical topic. **2b:** Students will examine and analyze primary and secondary sources in order to differentiate between historical facts and historical interpretations. **History Standard 3:** Students will interpret historical data [Interpretation]. **3a:** 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.	The study of history develops empathy for others, critical thinking (like historians), and knowledge and learning about the past. The lives of Americans are shaped and reshaped by the times in which they live. The story of each generation's struggle with the founding ideas of equality, rights, liberty, opportunity, and democracy lies at the heart of our nation's history and who we are as Americans.	**Essential Questions:** What is history? Why should we study history? How are the lives of everyday people affected by larger historical events? What are the ideals on which America is founded? Why are those ideals important? **Learning Targets:** • Students will understand that history begins with a question or a problem. • Students will be able to describe how historians select and weigh evidence. • Students will be able to describe how historians reconstruct and interpret the past • Students will be able to describe the founding ideals of the United States.	**Suggested Formative Assessments:** Main idea activities Vocabulary activities Quiz game Alternative assessment handbook Test practice handbook Critical thinking and extension activities Participation in oral class discussions Exhibitions Portfolios Exit Tickets Narrative assessments Weekly Individual write-ups Reflective journals Mentor Evaluations **Suggested Summative Assessment:** Chapter assessment Unit assessment

History Standard 4: Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content].			
Unit Two: ERA 1: CHALLENGES TO AMERICAN IDEALS **Timeline: 3 weeks**			
History Standard 1: Students will employ chronological concepts in analyzing historical phenomena [Chronology]. **1a:** 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. **History Standard 3:** Students will interpret historical data [Interpretation]. **3a:** 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. **History Standard 4**: Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content]. **Civics Standard 2:** Students will understand the principles and ideals underlying the American political system **9-12a:** Students will examine and analyze the extra-Constitutional role that political parties play in American politics. **9-12b:** Students will understand that the functioning of the government is a dynamic	The Civil War was a painful, yet cathartic moment in US history, clarifying our ideals and values as a nation. Reconstruction redefined people's notions about American's ideals, as leaders struggled to rebuild a nation, patching fundamental differences.	**Essential Questions:** How did the Civil War affect the US and its people? How was the nation's commitment to its founding ideals tested during Reconstruction? **Learning Targets:** • Students will be able to describe the impact of war. • Students will be able to describe the challenges facing government leaders. • Students will be able to describe the contribution of women and African Americans to the war effort.	**Suggested Formative Assessments:** Main idea activities Vocabulary activities Quiz game Alternative assessment handbook Test practice handbook Critical thinking and extension activities Participation in oral class discussions Exhibitions Portfolios Exit Tickets Narrative assessments Weekly Individual write-ups Reflective journals Mentor Evaluations **Suggested Summative Assessment:** Chapter assessment Unit assessment

process which combines the formal balances of power incorporated in the Constitution with traditions, precedents, and interpretations which have evolved over the past 200 years.			
Unit Three: Delaware Model Unit- Changing Interpretations of Reconstruction **Timeline: 3 weeks**			
History Standard 3 - Students will interpret historical data [Interpretation]. **3a**- 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.	Reconstruction played an integral part in American history.	**Essential Questions:** In what ways are historical interpretations influenced by the time in which they are written and by whom they are written? **Learning Targets:** • Students will examine historians' analyses of Reconstruction. • Students will identify key arguments in these analyses and place historians in a school of historical thought.	**Culminating assessments for Delaware Model Unit** In mixed-ability pairs or groups of three, have students examine Reconstruction Document C, Document D, and Document E. Students complete the chart. Students decide which school of Reconstruction Historiography each document belongs and why. Transfer Task: Historical views of Columbus
Unit Four: ERA 2: INDUSTRIALISM AND REFORM **Timeline: 3 weeks**			
History Standard 1: Students will employ chronological concepts in analyzing historical phenomena [Chronology]. **1a:** 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. **History Standard 4**: Students will develop historical knowledge of major events and	The westward movement represented the pursuit of the American Dream for some and bitter disappointment for others. Innovations in technology boosted industry, produced greater access to goods and services, and improved living conditions for many Americans. Labor unions formed in response	**Essential Questions:** What opportunities and conflicts emerged as Americans moved westward? Was the rise of industry good for the United States and American workers? What was it like to be an immigrant to the U.S. around the turn of the century?	**Suggested Formative Assessments:** Main idea activities Vocabulary activities Quiz game Alternative assessment handbook Test practice handbook Critical thinking and extension activities Participation in oral class discussions Exhibitions Portfolios Exit Tickets

phenomena in world, United States, and Delaware history [Content]. **Economics Standard 1-** Students will analyze the potential costs and benefits of personal economic choices in a market economy **9-12a:** 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. **Economics Standard 2:** Students will examine the interaction of individuals, families, communities, businesses and governments in a market economy **9-12a:** 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.	to increased industry to improve poor working conditions, long hours, and low wages in factories. Immigrants faced challenges when coming to the U.S. and assimilating into American culture, yet the U.S. is stilled viewed as a land of opportunity. Problems at the turn of the 20th century were the result of rapid changes brought on by industrialization, urbanization, and immigration. Progressives promoted American ideas as they worked through the government to solve the problems of American in the early 20th century.	What social, political, and environmental problems did Americans face at the turn of the 20th century? How did the progressives impact the lives of Americans? **Learning Targets:** • Students will be able to describe why Europeans immigrated to the U.S. • Students will be able to describe the response to New European Immigrants.	Narrative assessments Weekly Individual write-ups Reflective journals Mentor Evaluations **Suggested Summative Assessment:** Chapter assessment Unit assessment
Unit Five: Delaware Model Unit-Migration Patterns **Timeline: 3 weeks**			
History Standard 3 - Students will interpret historical data [Interpretation]. **3a**- 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.	Places are unique associations of natural environments and human cultural modifications. Concepts of site and situation can explain the uniqueness of places. As site or situation change, so also does the character of a place.	**Essential Questions:** Why are some places in America more culturally diverse or similar than others? To what extent does the culture of a place change over time? How has the culture of places in America changed as a result of migration patterns? **Learning Targets:**	**Culminating assessment associated with Delaware Model unit** *****Problem-** It is 1881, and Congress is debating the passage of the Chinese Exclusion Act. As a 60-year-old, general store owner who moved to California during the Gold Rush, you have seen the effects that large-scale immigration has had on your state. You wish to have your views on the issue heard.

		• Students will be able to explain the reasons for culturally diverse and similar regions in 19th century America. • Students will be able to explain the push-pull effect of immigration and subsequent settlement patterns in America. • Students will be able to analyze the effects culture change had on economic activity.	****Product-** Write a letter to your Congressman that explains your views and the cultural changes your state has experienced as a result of increased immigration in recent years. Your letter should include the following: •An overview of the push-pull factors for Chinese immigration during the 19th century. •An evaluation of the economic impact of Chinese immigration in California. •An evaluation of the cultural impact of Chinese immigration in California. •An explanation of why you do or do not support the Chinese Exclusion Act.
Unit Six: Era 3: Expanding Global Influences **Timeline: 3 weeks**			
History Standard 1: Students will employ chronological concepts in analyzing historical phenomena [Chronology]. **1a:** 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. **History Standard 3:** Students will interpret historical data [Interpretation]. **3a:** 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.	After expanding across the North American continent in the 1800's, America could no longer ignore the global stage, rising as an imperialist nation with interests on the global stage. WWI was the first modern war where technology affected how war was fought and how it ended. During WWI, the need for national unity was weighed against the rights of Americans to oppose the war. The Treaty of Versailles was a careful balance between the individual interests of the allies	**Essential Questions:** Where U.S. interventions abroad between 1890 and 1917 motivated more by realism or idealism? Was it in the national interest of the U.S. to stay neutral or declare war in 1917? How was WWI different from previous wars? Should the U.S. have ratified or rejected the Treaty of Versailles? **Learning Targets:** • Identify the reasons for	**Suggested Formative Assessments:** Main idea activities Vocabulary activities Quiz game Alternative assessment handbook Test practice handbook Critical thinking and extension activities Participation in oral class discussions Exhibitions Portfolios Exit Tickets Narrative assessments Weekly Individual write-ups Reflective journals Mentor Evaluations **Suggested Summative Assessment:** Chapter assessment

History Standard 4: Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content]. **Geography Standard 1-** Students will develop a personal geographic framework, or "mental map," and understand the uses of maps and other geo-graphics **9-12a:** 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 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) -- Complementarity (the mutual exchange of people or goods among places usually occurs over the shortest possible distances) **Geography Standard 3**- Students will develop an understanding of the diversity of human culture and the unique nature of places **9-12a:** Students will understand the processes which result in distinctive cultures, economic activity, and settlement form in particular locations across the world	with Wilson's vision for a peaceful world.	WWI • Locate where the U.S interests in expanding their imperial power and identify the interest in those areas • Identify how technology affected the outcome of the war.	Unit assessment
Unit Seven: Delaware Model Unit- Analyzing Historical Data **Timeline: 3 weeks**			
History Standard 2 - Students will gather, examine, and analyze historical data. **2b**- Students will examine and analyze primary and secondary sources in order to differentiate	Historians derive their interpretations of the past from multiple, sometimes conflicting, sources.	**<u>Essential Questions:</u>** Why does differentiating between fact and interpretation matter?	**Performance and Transfer Tasks associated with the Delaware Model Unit** This unit has two summative

between historical fact and interpretations.	Historians must prove where the information can be found that is the basis for historical conclusions.	Why is it necessary to consult multiple sources when studying the past? **Learning Targets:** • Students will be able to analyze primary and secondary documents in order to differentiate between fact and opinion. • Students will be able to recognize the value and limitations of historical documents. • Students will be able to analyze historical data in order to construct their own interpretation of the past.	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.
Unit Eight: ERA 4: ROARING TWENTIES AND THE GREAT DEPRESSION **Timeline: 3 weeks**			
History Standard 1: Students will employ chronological concepts in analyzing historical phenomena [Chronology]. **1a:** 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. **History Standard 3:** Students will interpret historical data [Interpretation]. **3a:** 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.	Government must maintain a balanced approach to overseeing business and banking. American families shouldered the burdens of financial and emotional stress; however Americans were resourceful and found ways to survive. During the Great Depression, FDR expanded the role of government into the everyday lives of Americans.	**Essential Questions:** What effects did postwar tensions have on America's founding ideals? Did the Republican Era of the 1920's bring peace and prosperity to all Americans? What lessons can be learned from the Great Depression? What should the government's role be in people's everyday lives? Do Americans have the right to economic security?	**Suggested Formative Assessments:** Main idea activities Vocabulary activities Quiz game Alternative assessment handbook Test practice handbook Critical thinking and extension activities Participation in oral class discussions Exhibitions Portfolios Exit Tickets Narrative assessments Weekly Individual write-ups Reflective journals Mentor Evaluations **Suggested Summative Assessment:**

History Standard 4: Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content].		**Learning Targets:** • Students will be able to identify the issues that troubled Americans in the years after World War I. • Students will be able to identify the economic developments that took place in the 1920s. • Students will be able to describe the difference between urban and rural areas. • Students will be able to consider the influence of popular culture, mass media, and cultural movements such as the Harlem Renaissance. • Students will be able to identify the weaknesses in the American economy exposed by the 1929 stock market crash. • Students will be to outline the actions taken by President Hoover to combat the Great Depression and consider how successful they were. • Students will be able to explain how the New Deal attempted to solve the problems of the Great Depression.	Chapter assessment Unit assessment
Unit Nine: Delaware Model Unit-Historical Research **Timeline: 3 weeks**			
History Standard 2 - Students will gather, examine, and analyze historical data.	Every citizen must critically examine points of view for how	**Essential Questions:** What is the evidence for this	**Culminating assessment associated with Delaware Model Unit**

2a- Students will develop and implement effective research strategies for investigating a given historical topic. **2b**- Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations.	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.	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? **<u>Learning Targets:</u>** • Students will be able to analyze, access, manage, integrate, evaluate, and create information in a variety of forms and media • Students will understand, manage, and create effective oral, written, or multimedia communication • Students will be able to locate appropriate resources • Students will be able to analyze the use of sources that form ones opinion	***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 ****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

Unit Ten: ERA FIVE: WORLD WAR II **Timeline: 3 weeks**			
History Standard 1- Students will employ chronological concepts in analyzing historical phenomena [Chronology]. **1a**-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. **History Standard 2 -** Students will gather, examine, and analyze historical data. **2a-** Students will develop and implement effective research strategies for investigating a given historical topic. **2b**- Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations. **History Standard 3** - Students will interpret historical data [Interpretation]. **3a**- 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. **History Standard 4**- Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content]. **4a**- 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)	The demands of WWII created new opportunities for many Americans. While fighting racism and genocide in Europe, America struggled with racism at home. During WWII, the U.S. transitioned from an isolationist nation into a global superpower. To maintain national security, the U.S. had to work with other countries to maintain global peace.	**Essential Questions:** Could WWII have been prevented? How did Americans band together on the home front to support the war? What demands did WWII place on different groups of Americans? What military strategies did the U.S. and its allies pursue to defeat the Axis powers in WWII? To what degree should a superpower work to maintain peace outside of its borders? **Learning Targets:** • Students will be able to explain how totalitarian rulers rose to power in Europe and Asia. • Students will be able to describe how the United States became involved in World War II. • Students will be able to discuss the wartime mobilization of various industries. • Students will analyze the war's effects on the home front. • Students will be able to discuss the causes and	**Suggested Formative Assessments:** Main idea activities Vocabulary activities Quiz game Alternative assessment handbook Test practice handbook Critical thinking and extension activities Participation in oral class discussions Exhibitions Portfolios Exit Tickets Narrative assessments Weekly Individual write-ups Reflective journals Mentor Evaluations **Suggested Summative Assessment:** Chapter assessment Unit assessment

--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) **4b**- 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)		outcomes of the Korean War. • Students will be able to describe how the Cold War affected life in the United States.	
Unit Eleven: ERA SIX: THE COLD WAR AND POST-WAR AMERICA **Timeline: 3 weeks**			
History Standard 1- Students will employ chronological concepts in analyzing historical phenomena [Chronology] **1a**-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. **History Standard 2 -** Students will gather, examine, and analyze historical data. **2a-** Students will develop and implement effective research strategies for investigating a given historical topic. **2b**- Students will examine and analyze primary	The Cold War was based on differing ideologies and mutual mistrust between the U.S. and the U.S.S.R. The Cold War was a war of words, using propaganda, diplomacy, economic and military aid, and espionage as weapons, fueled by the nuclear arms race. The Cold War prompted fear and anxiety, prompting the government to root out communist subversion, questioning American ideals. The 1950's saw a rise of millions	**Essential Questions:** Where the methods used by the U.S. to contain communism justified? How can a free people best balance the ideal of liberty with the need for national security? How has the Cold War influenced foreign policy in the last six decades? Why are the 1950's remembered as a time of affluence? Why did poverty persist in the	**Suggested Formative Assessments:** Main idea activities Vocabulary activities Quiz game Alternative assessment handbook Test practice handbook Critical thinking and extension activities Participation in oral class discussions Exhibitions Portfolios Exit Tickets Narrative assessments Weekly Individual write-ups Reflective journals Mentor Evaluations **Suggested Summative Assessment:**

and secondary sources in order to differentiate between historical fact and interpretations. **History Standard 3** - Students will interpret historical data [Interpretation]. **3a**- 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. **History Standard 4**- Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content]. **4a**- 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) **4b**- 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)	of working-class families into the middle class. The rise of the middle class left behind millions of poor people, who struggled to survive. The civil rights movement confronts mainstream American culture with the stark differences in how American ideals are lived out by various groups. When the voices of many citizens stand together and use their first amendment rights to oppose injustice, the government must respond. The 1960's was a time of turbulence and change in the 20th century.	U.S. despite the affluence of the 1950's? How did segregation affect American life in the postwar period? How did civil rights activists advance the ideals of liberty, equality, and opportunity for African Americans? How and why did the civil rights movement expand beyond African Americans? What is the proper role of government in shaping American society? **<u>Learning Targets:</u>** • Students will be able to discuss the foreign policy challenges that President Kennedy faced. • Students will be able to describe President Johnson's Great Society. • Students will be able to explain early efforts to end segregation. • Students will be able to analyze the victories of the civil rights movement. • Students will be able to discuss how the civil rights movement changed over time. • Students will be able to explain how the United	Chapter assessment Unit assessment

		States became involved in the conflict in Vietnam. • Students will be able to discuss the impact the fighting in Vietnam had on American society. • Students will be able to identify the war's lasting effects on the 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.	
Unit Twelve: ERA SEVEN: THE MAKING OF MODERN AMERICA **Timeline: 3 weeks**			
History Standard 1- Students will employ chronological concepts in analyzing historical phenomena [Chronology] **1a**-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. **History Standard 2 -** Students will gather, examine, and analyze historical data. **2a-** Students will develop and implement effective research strategies for investigating a given historical topic.	America stands as a barrier of defense between fledgling democracies and those who would smother them. The United States' involvement in a war to support democracy needs to be weighed against the cost – troops and finances. No one is above the law. The 1970's was time of shifting pubic consciousness on the environment, ethnicity, retirement, and gender equality.	**Essential Questions:** How did the Vietnam War challenge the ideals of America? What is the role of the United States in establishing democracies around the world? Is it possible to support American troops without support the war? How should historians characterize the 1970's? How do leaders manage a	**Suggested Formative Assessments:** Main idea activities Vocabulary activities Quiz game Alternative assessment handbook Test practice handbook Critical thinking and extension activities Participation in oral class discussions Exhibitions Portfolios Exit Tickets Narrative assessments Weekly Individual write-ups Reflective journals Mentor Evaluations

2b- Students will examine and analyze primary and secondary sources in order to differentiate between historical fact and interpretations. **History Standard 3** - Students will interpret historical data [Interpretation]. **3a**- 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. **History Standard 4**- Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history [Content]. **4a**- 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) **4b**- 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)	Under Reagan, the economy revived, but the federal deficit soared; he approached greater social problems with conservatism. In a country deeply divided by party politics, no president could accomplish all that he had hoped. The end of the Cold War brought hopes for an era of world peace and cooperation; however, the vacuum gave rise to terrorism. After 9/11, Americans were left with a sense of vulnerability. The context of 9/11 places a new lens of understanding on the founding ideals of equality, rights, liberty, opportunity, and democracy.	foreign country's abuses of human rights when the U.S. has other interests in the area? Was the Regan Revolution good for America? How well did Bush, Clinton, and Bush fulfill their domestic agendas? How well did U.S. foreign policy decisions meet the challenges of the post-Cold War era? What is America's role in providing humanitarian aid to other countries when its own citizens live in poverty? In an age of terrorism, can we keep our country secure without compromising the nation's founding ideals? Can the U.S. continue to be a land of opportunity while trying to close its borders to terrorists? **Learning Targets:** • Students will be able to outline the domestic and foreign policies that President Nixon followed. • Students will be able to explain how the Watergate scandal led to President Nixon's resignation. • Students will be able to identify the challenges that the Ford and Carter	**Suggested Summative Assessment:** Chapter assessment Unit assessment

--The 20th Century world (1900-present)		administrations faced. • Students will be able to discuss the new conservatism that emerged with the elections of Reagan and Bush. • Students will be able to describe the social concerns of the 1980s. • Students will be able to explain how changes throughout the world affected U.S. foreign policy. • Students will be able to explain why divisions developed in the country at the beginning of the new millennium. • Students will be able to describe the basis of the economic boom in the late 20^{th} century. • Students will be able to demonstrate how technological developments have affected life in the United States.	

Curriculum Framework for Humanities/English 9

School: The Delaware Met **Curricular Tool:** Common Core Curriculum Maps[1] **Grade or Course** 9th

Standards Alignment	Enduring Understandings	Essential Questions or Student Learning Targets	Assessments
Unit One: How Well Do We Tell Stories? **Timeline : 4 weeks**			
CC9-10RL1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. **CC9-10RL5:** Analyze how an author's choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise. **CC9-10W2:** Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. **CC9-10SL1:** Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. **CC9-10L5:** Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.	Upon entering high school, students arrive with varying degrees of preparation, and this unit enables students to develop a common understanding of important literary elements, as well as a shared vocabulary for discussing them. Each story may be used to focus especially on a particular element, such as "point of view" in "The Cask of Amontillado" by Edgar Allan Poe or "symbolism" in "The Scarlet Ibis" by James Hurst.	Identify and explain plot structure (i.e., exposition, rising action, crisis/climax, falling action, resolution) in stories read. Understand and explain why plots in short stories usually focus on a single event. Analyze how authors create the setting in a short story. Define the concept of theme and identify the theme(s) in stories read. Identify and explain characterization techniques in short stories. Identify and explain the use of figurative language in short stories. Analyze how authors create tone in short stories. Identify the point of view in a short story and analyze how point of view affects	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records Suggested Summative Assessments: **Essay:** Select a short story and write an essay that analyzes how a particular literary element plays a part in the essence and workings of one of the chosen stories. State thesis clearly and include at least three pieces of evidence to support the thesis. (CC9-10RL1, CC9-10W2) **Discussion:** Select two works of art to view as a class. Compare the two works, focusing the discussion on the relationship between character and setting, and on how the artists combined these to suggest a narrative.

[1] Elements of this map are taken from the *Common Core Curriculum Maps in English Language Arts*, available at www.commoncore.org, accessed November 28, 2011.

Standards Alignment	Enduring Understandings	Essential Questions or Student Learning Targets	Assessments
		the reader's interpretation of the story. Write a coherent essay of literary analysis with a clear thesis statement, at least three pieces of evidence from texts, and a strong introduction and conclusion.	**Essay:** Select a short story and an artwork and write an essay in which you discuss the use of symbolism in each. State thesis clearly and include at least three pieces of evidence to support the thesis. (CC9-10RL4, CC9-10W2) **Speech:** Select a one minute passage from one of the short stories and recite it from memory. Include an introduction that states what the excerpt is from, who wrote it, which literary element is exemplifies and why. (CC9-10RL2, CC9-10SL6)
SOCIAL STUDIES INTEGRATION: Regional Planning Unit **ELA CONCEPT: Reading Informational Text** **Timeline: 3 weeks**			
CC9-10RI6: Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose. **CC9-10RI10:** By the end of grade 9, read and comprehend literary nonfiction in the grades 9-10 text complexity band proficiently, with scaffolding as needed at the high end of the range. **C9-10W2:** Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.	Informational texts have specific structures and sequences. Good readers use a variety of strategies to help them understand what they read.	Which reading strategies are best used with informational texts? How will reading strategies help me understand what I read? Students will read and comprehend literary nonfiction and analyze how an author uses rhetoric, and produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records Summative Assessments: **Social Studies Assessment:** Presenting a problem **ELA Assessment:** Cause/Effect essay

Standards Alignment	Enduring Understandings	Essential Questions or Student Learning Targets	Assessments
			contextualized to a student selected local r**egi**onal planning case study.
Unit Two: Is Honor Inherent or Bestowed? **Timeline: 4 weeks**			
CC9-10RL2: Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. **CC9-10RL3:** Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme. **CC9-10RI3:** Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them. **CC9-10W2:** Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. **CC9-10SL2:** Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally), evaluating the credibility and Accuracy of each source. **CC9-10L4:** Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, choosing flexibly from a range of strategies.	Students apply the knowledge of literary elements explored in unit one to a new literary form, the novel, and discuss the similarities and differences between how those elements are developed in short stories and in novels. Setting and characterization are highlighted, with particular attention paid to the question of which characters in *To Kill A Mockingbird* may be called "honorable." Paired informational texts illuminate the historical context of the Great Depression and the Jim Crow South.	Learn about the history of the novel as a literary form. Recognize the importance of historical context to the appreciation of setting and character. Identify and analyze major and minor characters. Analyze and explain characterization techniques. Understand that novels may more than one plot and explain the use of multiple plots in *To Kill A Mockingbird*. Recognize the importance of point of view in *To Kill A Mockingbird* and why it wouldn't be the same story told from someone else's point of view.	<u>Formative Assessments:</u> • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Suggested Summative Assessments:</u> **Essay:** Select a quotation from one of the characters of *To Kill a Mockingbird* (or other novel, if applicable) and write an argument that explains what the quotation reveals about the theme of honor in the book. State thesis clearly and include at least three pieces of evidence to support the thesis. (CC9-10RL1, CC9-10RL2, CC9-10RL3) **Essay:** Write an essay that compares primary source accounts of the "Scottsboro Boys" trial with Scout's account of the trial in TKAM. Discuss how novels can reveal dimensions of history even though they are fictional. State thesis clearly and include at least three pieces of evidence to support the thesis. (CC9-10RL1,

Standards Alignment	Enduring Understandings	Essential Questions or Student Learning Targets	Assessments
			CC9-10RI7, CC9-10W2) **Essay:** Select a documentary photograph from the Library of Congress's website of Farm Security Administration-Office of War Information Collection (FSA-OWI) or an excerpt from the primary or secondary source accounts of "The Scottsboro Boys" trial and explain in an essay how the image or the source account helps illuminate your understanding of life during the depression in the American south. State thesis clearly and include at least three pieces of evidence to support the thesis. (CC9-10RI7, CC9-10W2) **Speech:** Select a one-minute descriptive passage from *To Kill A Mockingbird* and recite it from memory. Include an introduction that states what the excerpt is, why the book is significant, how the passage exemplifies one of the book's themes. (CC9-10RL2, CC9-10SL4) **Oral Presentation:** Describe whether the 1962 film version of *To Kill A Mockingbird* is faithful to the novel. Cite evidence for why or why not, explaining why you think the film's director chose to omit or emphasize certain events. State thesis clearly and include at least three pieces of evidence to support the thesis. (CC9-10RL7) **Oral Presentation:** Present several photographs of small southern towns during the depression from Dorothea Lange's or The Library of Congress' collections and compare them the description of Maycomb in *To Kill A Mockingbird*. Say which rendering is more vivid to you and explain why. State your thesis clearly and include at least three pieces of evidence to support the thesis. (CC9-10RL4, CC9-10SL5)

Standards Alignment	Enduring Understandings	Essential Questions or Student Learning Targets	Assessments
SOCIAL STUDIES INTEGRATION: Dams – Humans Modify the Environment **ELA CONCEPT: Author's Purpose** **Timeline: 3 weeks**			
CC9-10W4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.) **CC9-10W6:** Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically. **CC9-10RI6:** Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.	Writers use a variety of structures and carefully chosen words to convey purpose.	How and why do writers make their ideas visible for readers? Students will determine an author's purpose, analyze how an author uses rhetoric, and produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records Summative Assessments: **Social Studies Assessment:** Informative report **ELA Assessment:** Problem/solution Video documentary or essay assessed using rubric
Unit Three: Poetry and Beauty **Timeline: 4 weeks**			
CC9-10RL4: Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of several word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone). **CC9-10RI.2:** Determine a central idea of a text and	Having studied both the short story and the novel, students now consider why poetry is different than prose, and in particular they examine the power and expressive potential of imagery and other kinds of	Define and offer examples of various forms of poetry. Identify the form, rhyme scheme, and meter of poems studied. Define and explain poetic devices, such as alliteration,	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals

Standards Alignment	Enduring Understandings	Essential Questions or Student Learning Targets	Assessments
analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. **CC9-10W8:** Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation. **CC9-10SL5:** Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. **CC9-10L3:** Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening	figurative language. They are exposed to poetry from a variety of cultures, noting the ways in which the poetic form is universal. As a way of being introduced to literary criticism, students read several authors' reflections of poetry and discuss whether they agree or disagree with their critiques. Finally, the unit is an opportunity to introduce students to the idea of "form" in art, examining masterpieces of art and architecture that exhibit an excellent distillation of visual elements (e.g., line, color, space, tone, weight, etc.).	assonance, consonance, and enjambment, and describe the ways in which they help reveal the theme(s) of the poem. Recognize and explain the distinguishing characteristics of various kinds of poetry, such as ballads, odes, lyric poetry, blank verse, haiku, and sonnets. Describe how poetry differs from prose and explain why authors would choose one form over another for a particular purpose. Complete a literary research paper, citing at least three sources.	• Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Suggested Summative Assessments:</u> **Essay:** Write an essay that compares and contrasts aspects of the use of a literary device in two different poems. Discuss at least three aspects. (CC9-10RL4, CC9-10W2) **Essay:** Choose a painting from among those you've viewed and compare it to one of the poems you've studied. Then choose one of the following poetic elements: mood, metaphor, symbol, or pattern. Write an essay in which you compare how the author and painter develop that element in each work. Cite at least three pieces of evidence for each work. (CC9-10RL7, CC9-10W2) **Essay:** View a reproduction of a Grecian Urn and write an essay in which you discuss the ways in which reading Keats's rendering of the urn is a different experience than viewing it. Discuss at least three differences. (CC9-10RL7, CC9-10W2) **Research Paper:** Select a poet and write a research paper in which you analyze the development of the writer's poetry in his/her lifetime using at least three poems and citing at least three secondary sources. (CC9-10RI1, CC9-10RI5, CC9-10RI6, CC9-10W2, CC9-10W7, CC9-10W8) **Speech:** Select a poem and recite it from memory. Include an introduction that states the

Standards Alignment	Enduring Understandings	Essential Questions or Student Learning Targets	Assessments
			title author, and type of poem and how the poem exemplifies the stated type of poetry. (CC9-10SL6) **Oral Presentation:** Discuss whether you agree with Seamus Heaney when he credits poetry "because credit is due to it, in our time and in all time, for its truth to life, in every sense of that phrase." Say why or why not and give examples from poems studied or other poems to illustrate your position. State thesis clearly and include at least three pieces of evidence to support the thesis. (CC9-10RI4, CC9-10RI5, CC9-10RI6, CC9-10SL4, CC9-10SL6)
SOCIAL STUDIES INTEGRATION: Project Citizen **ELA CONCEPT: Persuasion and Argument** **Timeline: 3 weeks**			
CC9-10W1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. **CC9-10W2:** Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. **CC9-10SL4:** Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task. **CC9-10RI5:** Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter).	Persuasive techniques can be used to craft a presentation that will influence others and defend a position.	What strategies and techniques do writers use to persuade and influence others? How can I defend a position and effectively influence others? Students will present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records Summative Assessments: **Social Studies Assessment:** Create a marketing campaign **ELA Assessment:** Persuasive Speech assessed

Standards Alignment	Enduring Understandings	Essential Questions or Student Learning Targets	Assessments
			using a rubric
Unit Four: Are We Governed by Fate or Free Will? **Timeline: 5 weeks**			
CC9-10RL3: Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme. **CC9-10RL5:** Analyze how an author's choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise. **CC9-10RL9:** Analyze how an author draws on and transforms source material in a specific work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare). **CC9-10RI1:** Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text **CC9-10W2:** Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. **CC9-10SL1:** Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.	Students read *Antigone* or *Oedipus the King,* learning about the classic Greek tragedy form. Students examine Aristotle's *Poetics* and his definitions of comedy and tragedy to deepen their understanding of tragedy. They read Shakespeare's *Romeo and Juliet* and compare and contrast the ways in which the plays treat the related theme of "fate versus free will." Building on the poetry unit, students will also consider Shakespeare's use of rhythm, punctuation, and imagery and the ways in which they help convey the motives, thoughts, and feelings of the characters. This unit will confirm students' shared understanding of the elements of drama, preparing them for the study of other dramatic works throughout high school.	Identify and explain the elements of drama in general and Greek drama in particular (see terminology). Explain the structure of the plot(s) and describe the dramatic techniques the playwright uses to advance them. Trace the development of major and minor characters and explain how characterization advances the plot or theme. Understand Aristotle's definitions of comedy and tragedy and explain how the other works studied exemplify the term "tragedy." Analyze the playwright's use of irony. Identify the poetic devices used in *Romeo and Juliet* and explain their effect.	<u>Formative Assessments:</u> • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Suggested Summative Assessments:</u> **Essay:** Write an essay that compares and contrasts aspects of tragic illumination in the tragedies of *Romeo and Juliet* and *Antigone* (or *Oedipus the King*). State thesis clearly and include at least three pieces of evidence to support the thesis. (CC9-10RL2, CC9-10RL3, CC9-10W2) **Essay:** Write an essay in which you discuss the extent to which one of the dramas studied adheres to Aristotle's definition of tragedy. State thesis clearly and include at least three pieces of evidence to support the thesis. (CC9-10RL2, CC9-10RL3, CC9-10W2) **Speech:** Select a one-minute passage from one play and recite it from memory. Include an introduction that states what the excerpt is, why

Standards Alignment	Enduring Understandings	Essential Questions or Student Learning Targets	Assessments
CC9-10L6: Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.			the passage is significant, and how the passage exemplifies one of the play's themes. (CC9-10RL2, CC9-10SL4, CC9-10SL6) **Oral Presentation:** Compare the rendering of Carravagio's *The Death of the Virgin* to Act V, scene iii of *Romeo and Juliet.* How do the artist and the playwright create dramatic effects? Describe and explain the significance of at least three examples. (CC9-10RL7)
SOCIAL STUDIES INTEGREATION: RESPONSIBILITIES OF CITIZENSHIP **ELA CONCEPT: RESEARCH** **Timeline: 4 weeks**			
CC9-10W4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. **CC9-10W7:** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. **CC9-10W8:** Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation. **CC9-10W9:** Draw evidence from literary or informational texts to support analysis, reflection, and research.	Gathering appropriate information is important to success in school and everyday life.	How do I find the right information? How do I gather original data? Students will conduct a short as research projects to answer a question or solve a problem, demonstrating understanding of the subject under investigation.	<u>Formative Assessments:</u> • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Summative Assessments:</u> **Social Studies Assessment**: Survey and Storyboard **ELA Assessment:** Manual or introductory guide to a topic assessed using a rubric

Standards Alignment	Enduring Understandings	Essential Questions or Student Learning Targets	Assessments
Unit Six: How is Reflecting Different from Remembering? The Memoir, The Essay, and The Speech **Timeline: 5 weeks**			
CC9-10RL4: Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of several word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone). **CC9-10RI3**: Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them. **CC9-10RI9:** Analyze seminal U.S. documents of historical and literary significance (e.g., Washington's Farewell Address, the Gettysburg Address, Roosevelt's Four Freedoms speech, King's "Letter from Birmingham Jail"), including how they address related themes and concepts. **CC9-10W3:** Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. **CC9-10SL3:** Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence. **CC9-10L1:** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	The unit allows students to recognize and appreciate the effective use of literary devices in nonfiction. Students are exposed to memoirs from various cultures and look for common techniques, such as the emphasis on a particularly significant event or time period in the author's life. Selected art works that address similar goals, such as self-portraits, are examined to compare presentation. Students also consider the ways in which essays and speeches may exhibit the same reflective qualities, whereby the authors/orators engage readers/listeners to think carefully about literature, events, or ideas in a new way.	Identify and explain the characteristics of a memoir Distinguish between an autobiography and a memoir. Identify and explain the effect of stylistic devices used in memoirs. Identify and explain the characteristics of various types of essays (e.g., literary, narrative, etc.). Identify and analyze the effect of rhetorical strategies in speeches such as alliteration, repetition, and extended metaphors. Apply rhetorical strategies learned in this lesson to essay writing projects of their own.	<u>Formative Assessments:</u> • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Suggested Summative Assessments:</u> **Memoir:** Write a memoir (after the style of one of those read—optional) recounting a specific person, place, experience, event, day, moment, work of art, or another specific thing and convey its significance to you. (CC9-10W3) **Literary Criticism Essay:** Write an essay in which you discuss how two literary texts studied illustrate Faulkner's thesis in his 1949 Nobel Prize acceptance speech. State your thesis clearly and include at least three pieces of evidence to support it. (CC9-10RL2, CC9-10RI9, CC9-10W2) **Speech:** Select a one-minute passage from one of the speeches here and recite it from memory. Include an introduction that explains the occasion/context of the speech and its literary and historic significance (CC9-10SL6)

Standards Alignment	Enduring Understandings	Essential Questions or Student Learning Targets	Assessments
			Oral Presentation: Discuss how one of the paintings studied exhibits characteristics of (self-) reflection and compare it to one of the memoirs read. State thesis clearly and include at least three pieces of evidence to support the thesis. (CC9-10RL7, CC9-10SL5)

Curriculum Framework for Humanities/English 10

School: The Delaware Met **Curricular Tool:** Common Core Curriculum Maps[1] **Grade or Course** 10th

Standards Alignment	Unit Concept	Essential Questions Student Learning Targets	Assessments
Unit One: Latin and Central American Literature **Timeline : 8 weeks**			
Cc9-10RL1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. **CC9-10RL4:** Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone). **CC9-10RL6:** Analyze a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature. **CC9-10RI5:** Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter). **CC9-10RI8:** Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.	Students consider religious, generational, and cultural conflicts, as well as the effects of modernization, political struggle, and other themes common to many literary works. Magical realism is found in this unit and may be compared to that found in the Russian unit (4). Students also recognize how not all literary works make explicit political or cultural statements and must be approached on their own terms. In order to enrich their understanding, students investigate the historical background for selected works, as well as read author biographies.	Explore the role of the magical and fantastic in Latin American literature. Explore narrative forms and techniques in Latin American literature. Analyze the role of time in Latin American narrative. Listen to and analyze Latin American poetry in the original and in translation. Explore the role of local and universal themes in Latin American literature. Consider the challenges of translation, including the different connotations that various cultures attach to given words. Offer insightful inferences regarding the themes of the text. Create clear, original, specific thesis statements. Organize concrete evidence and	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records Suggested Summative Assessments: **Seminar and Essay:** How does magical realism in *The Short Stories of Eva Luna*, "The Secret Miracle," "The Garden of Forking Paths," *House of Spirits,* OR *Like Water for Chocolate* help the reader gain a deeper understanding of reality? How does magical realism reveal the author's true point of view? Write and essay in which you use at least three pieces of specific textual evidence to support an original thesis statement. (CC9-10RI5, CC9-10W2, CC9-10W4, CC9-10W9, CC9-10SL1) **Seminar and Essay:** Consider magical realism in

[1] Elements of this map are taken from the *Common Core Curriculum Maps in English Language Arts*, available at www.commoncore.org, accessed November 28, 2011.

Standards Alignment	Unit Concept	Essential Questions Student Learning Targets	Assessments
CC9-10W4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. **CC9-10W5:** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. **CC9-10W10.6:** Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically. **CC9-10W9:** Draw evidence from literary or informational texts to support analysis, reflection, and research. **CC9-10SL6:** Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grades 9–10 Language standards 1 and 3 on pages 54 for specific expectations.) **CC9-10L5:** Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. **CC9-10L6:** Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.		supporting textual details to support a thesis statement. Use precise language, avoiding casual language and clichés. Write appropriate transitions to organize paragraphs. Analyze how literary devices produce meaning.	*The Short Stories of Eva Luna*, "The Secret Miracle," "The Garden of Forking Paths," *House of Spirits*, OR *Like Water for Chocolate.* How is magical realism a metaphor? What is the relationship between the literal and the metaphoric? Does the reader need to suspend their notions of reality to accept the device of magical realism of the text? Defend your response using textual evidence to support an original thesis. Write an essay in which you use at least three pieces of textual evidence to support an original thesis statement. (CC9-10RI5, CC9-10W2, CC9-10W4, CC9-10W9, CC9-10SL1) **Seminar and Essay:** What does Marquez mean by "solitude" in his Nobel Prize acceptance speech "The Solitude of Latin America" and his novel *One Hundred Years of Solitude*? How is solitude a metaphor? Is it a fitting metaphor? Why or why not? Use specific textual evidence to discuss. After seminar, write an essay using at least two pieces of textual evidence to support a clear thesis from both his speech and his novel. (CC9-10RL4, CC9-10W2, CC9-10W4, CC9-10W9, CC9-10SL1) **Seminar and Essay:** (*Note: This assessment is meant especially for bi-lingual students who have fluency or emerging fluency in both Spanish and English*.) Read key passages of "The Secret Miracle" or "The Garden of Forking Paths" in English and Spanish. Consider issues of translated texts. What skills does a good translator need to have? What if anything is lost in translation between the texts? Write and essay in which you organize three to six pieces (i.e., ideally, at least three pieces from each text) of textual evidence to support an original thesis statement in an essay. (CC9-10RL4, CC9-10W2, CC9-10W4, CC9-10W9, CC9-10SL1) **Seminar and Essay:** How does love serve as a metaphor? Is there one common statement the texts in this unit all seem to be making about love? If so,

Standards Alignment	Unit Concept	Essential Questions Student Learning Targets	Assessments
			what is that statement? After discussion in seminar, write a well organized essay using six pieces of textual evidence to support an original thesis statement. (CC9-10RL4, CC9-10W2, CC9-10W4, CC9-10W9, CC9-10SL1, CC9-10SL4) **Narrative:** Write a five-page short story inspired by any of the works in the unit. Read it aloud to the class and invite discussion about which work might have inspired it and how. (CC9-10W3) **Speech:** Choose a poem or a prose passage from this unit (three minutes maximum) and recite it from memory. Include an introduction that discusses who wrote the poem and when it was written (i.e., historical context); what makes it memorable or significant; and words and phrases that hold special meaning in context. (CC9-10RL2, CC9-10SL6, CC9-10L5) **Oral Presentation:** Prepare a ten-minute report on the life of a Latin American author, with pictures, maps, audio recordings, and any other applicable resources. (CC9-10RI1, CC9-10SL2, CC9-10SL5)
Unit Two: Asian Literature **Timeline: 8 weeks**			
CC9-10RL2: Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. **CC9-10RL5:** Analyze how an author's choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise.	Through reading the diverse selections in this unit, students consider the role of ancient philosophies, universal themes, Western influence, and historical change in these works. In addition, students listen to recordings of some of the poems in the original language, so that they may appreciate their sounds, structures, and rhythms.	Explore ancient and modern works of literature from Asian countries, particularly China, India, and Japan. Consider how Asian literature both draws on and questions cultural traditions. Consider how certain Asian authors integrate Western literary influences into their cultural contexts.	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students

Standards Alignment	Unit Concept	Essential Questions Student Learning Targets	Assessments
CC9-10RI1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. **CC9-10RI4:** Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper). **CC9-10W7:** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. **CC9-10W10:** Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences. **CC9-10SL1:** Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grades 9–10 topics, texts, and issues*, building on others' ideas and expressing their own clearly and persuasively. **CC9-10L2:** Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.		Compare two or more translations of a single poem. Write a close literary analysis of a work of poetry, fiction, or drama, considering language use and literary elements. Offer insightful inferences regarding the themes of the text. Create a clear, original, specific thesis statement. Organize concrete evidence and supporting textual details to support a thesis statement. Use precise language, avoiding casual language and clichés. Write appropriate transitions to organize paragraphs. Analyze how philosophy influences literature. Understand how literary devices convey theme.	• Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Suggested Summative Assessments:</u> **Seminar and Essay:** Analyze Akutagawa's story "In a Bamboo Grove" and Kurosawa's film *Rashomon*. How do the story and the film portray the characters' psychological states? (Note: Kurosawa's *Rashomon* is based on Akutagawa's "In a Bamboo Grove," not on his "Rashomon," though a few details from the latter story appear in the film.) Write an essay using at least three pieces of textual evidence to support an original thesis statement. (CC9-10RL7, CC9-10SL1, CC9-10W2) **Seminar and Essay:** How does fiction writer Ryunosuke Akutagawa or playwright Tsao Yu integrate Western literary influences into his work? Use textual evidence from the literary and informational texts to support an original thesis. Write an essay using at least three pieces of textual evidence to support your thesis statement. (CC9-10RL6, CC9-10RL9, CC9-10SL1, CC9-10W2, CC9-10W9) **Seminar and Essay:** How are the novels from India *Midnight's Children* and *Nectar in a Sieve* allegorical texts? What does the allegory reveal about the author's point of view? Use evidence from reference texts *Trading Places: The East India Company and Asia, 1600–1834* and *The Scandal of Empire: India and the creation of Imperial Britain.* Write an essay using at least three pieces of evidence from the novels and the reference texts to support an original thesis statement. (SL.9-10.1, W.9-10.2, W.9-10.9) **Seminar and Essay:** Compare and contrast *Midnight's Children* and *Nectar in a Sieve*. How do they differ in meaning? How are they similar in

Standards Alignment	Unit Concept	Essential Questions Student Learning Targets	Assessments
			meaning? Write an essay using at least two pieces of textual evidence from each text to support an original thesis statement. (CC9-10RL6, CC9-10RL9, CC9-10SL1, CC9-10W2, CC9-10W9) **Seminar and Essay:** What does Amal teach the other characters in Rabindranath Tagore's *The Post Office*? Do these teachings reflect the values of Confucianism or Taoism? Write an essay using at least three pieces of textual evidence to support an original thesis. (CC9-10RL1, CC9-10SL1, CC9-10W2, CC9-10W9) **Seminar and Essay:** Does the poem "Spirit, Substance, Shadow" connect to the teachings of Lao Tzu or Confucius? What does the poem reveal about these two philosophies? Write an essay using at least three pieces of textual evidence from multiple sources to support an original thesis statement. (CC9-10SL1, CC9-10W2, CC9-10W9) **Seminar and Essay:** How do the works you have read so far in this unit honor or rebel against cultural tradition? Write an essay that supports an original thesis statement, using at least three pieces of textual evidence to describe the cultural traditions. (The teacher may choose to focus on one or two texts.) (CC9-10RL6, CC9-10SL1, CC9-10W2, CC9-10W9) **Seminar and Essay:** How do Benjamin Hoff's allegories reveal Asian teachings? Do the allegories accurately illustrate these teachings? Write an essay that uses textual evidence to support an original thesis statement. Use evidence from more than one text. (CC9-10RL6, CC9-10SL1, CC9-10W2, CC9-10W9) **Seminar and Essay:** (*This assignment is especially appropriate for bi-lingual students who understand both languages presented in the texts.)* Read James Merrill's poem "Lost in Translation" and discuss it in the context of the works of Asian literature that

Standards Alignment	Unit Concept	Essential Questions Student Learning Targets	Assessments
			you have read in this unit. What skills does a good translator need? In translation, is meaning lost irrevocably to the reader? Write an essay that uses at least three pieces of textual evidence to support an original thesis. (CC9-10RL6, CC9-10SL1, CC9-10W2, CC9-10W9) **Essay:** Write a close literary analysis of one of the poems in the unit, with attention to its form, figurative language, symbolism, and meaning. Be sure to include any historical context necessary. Use at least three pieces of textual evidence to support your analysis in an essay. (CC9-10SL1, CC9-10W2, CC9-10W9) **Oral Presentation:** (*This assignment is especially appropriate for bi-lingual students who understand both languages presented in the texts.)* Choose a recording of a poem from *Chinese Poems of the Tang and Sung Dynasties*, or find a different recording. Play the recording and explain the literary structure of the poem. Present two translations of the poem and compare the choices the translators have made. (CC9-10RL5)
Unit Three: African and the Middle Eastern Literature **Timeline: 8 weeks**			
CC9-10RL1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. **CC9-10RL4:** Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).	Students consider the beauty and craftsmanship of the works, as well as the effects of the African and Middle Eastern colonial experience—and the subsequent challenges of the postcolonial era. They consider religious, generational, and cultural conflicts, effects of modernization, political struggle, and other themes common to many literary works. At the	Read a variety of literary works from Africa and the Middle East, particularly from the postcolonial period. Consider the challenges of translation, including the different connotations that various cultures attach to given words. Through analysis of literary works, explore the changing	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions

Standards Alignment	Unit Concept	Essential Questions Student Learning Targets	Assessments
CC9-10RL6: Analyze a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature. **CC9-10RI5:** Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter). **CC9-10RI8:** Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning. **CC9-10W4:** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. **CC9-10W5:** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. **CC9-10W6:** Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically. **CC9-10W9:** Draw evidence from literary or informational texts to support analysis, reflection, and research. **CC9-10SL6:** Adapt speech to a variety of	same time, students recognize that not all literary works make explicit political or cultural statements and must be approached on their own terms. In order to enrich their understanding, students investigate the historical background for selected works, as well as author biographies.	social structures of Middle Eastern and African societies. Explore various literary devices in plot development such as suspense, foreshadowing, symbolism, and extended metaphor. Trace the development of an idea or argument in a work of literary nonfiction. Offer insightful inferences regarding the themes of the text. Create a clear, original, specific thesis statement. Organize concrete evidence and supporting textual details to support a thesis statement. Use precise language, avoiding casual language and clichés. Write appropriate transitions to organize paragraphs. Analyze how literary devices convey theme.	• Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Suggested Summative Assessments:</u> **Seminar and Essay:** What is satire? What is being satirized in *Ethics of the Aristocrats* or *King Baabu*? What is the author's political point of view as revealed by this satire? Write an essay that uses at least three pieces of textual evidence to support an original thesis statement. (CC9-10RL1, CC9-10RL4, CC9-10W2) **Seminar and Essay:** Agree or disagree: "Personal crisis coincides with cultural change." (Teachers choose the work.) Discuss in seminar and then use at least three pieces of textual evidence to support an original thesis in an organized essay. (CC9-10RL6, CC9-10W2, CC9-10W9) **Seminar and Essay:** Writers are meant to: "Describe a situation so truthfully that the reader can no longer evade it." Choose an essay by Nadine Gordimer and explain what "truth" she develops in her essay. How does she develop that truth? Use at least three pieces of specific textual evidence from her essay to support an original thesis statement in an essay. (CC9-10RI5, CC9-10W2, CC9-10W4) **Seminar and Essay:** What is "chi" in its cultural context? Compare the use of "chi" (personal spirit) in *Things Fall Apart* and *The Joys of Motherhood*. After discussion, use two pieces of evidence from *each* text to support an original thesis statement that compares the two texts in an essay. (CC9-10RL1, CC9-10RL4, CC9-10W2, L5) **Seminar and Essay:** Agree or disagree: "It is possible to understand this piece of literature outside of its historical context." (Teachers choose the work.) In an organized essay, use textual evidence

Standards Alignment	Unit Concept	Essential Questions Student Learning Targets	Assessments
contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grades 9–10 Language standards 1 and 3 on pages 54 for specific expectations.) **CC9-10L5:** Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. **CC9-10L6:** Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.			from the work as well as from historical or reference works to support an original thesis statement. (CC9-10W1, CC9-10W2, CC9-10W5, CC9-10W6, CC9-10W7, CC9-10L6) **Seminar and Essay:** Is there a common concern of postcolonial literature, as reflected in the works of this unit? Is there one statement they all seem to be making about colonialism? If so, what is that statement? Write an essay using at least three pieces of textual evidence to support an original thesis statement. (CC9-10W2, CC9-10SL4) **Seminar and Essay:** Agree or disagree: "Moral choices are essentially choices between two sets of values: one belonging to one culture or era, one to another." Use textual evidence to support your response. After seminar, write an organized essay using at least three pieces of textual evidence to support an original thesis statement. (CC9-10W2, CC9-10SL3) **Creative Writing/performance:** Write a narrative monologue from the point of view of one of the *secondary c*haracters in *Things Fall Apart* or *The Lion and the Jewel*. Perform the monologue for the class. (CC9-10W3, CC9-10SL6) **Oral Presentation:** Working with a partner, choose a work in this unit with a character facing a difficult choice. Write and perform two monologues, each one defending a particular option. (CC9-10W3, CC9-10SL6) **Oral Presentation:** Choose a poem that you have read on this unit and recite it from memory. Include an introduction that discusses who wrote the poem and when it was written (i.e., historical context); and how the form of the poem and its meaning are related. (CC9-10RL2, CC9-10SL4, CC9-10SL6)

Standards Alignment	Unit Concept	Essential Questions Student Learning Targets	Assessments
SOCIAL STUDIES INTEGRATION: Economic Stability **ELA CONCEPT: Research** **Timeline: 4 weeks**			
CC9-10RI1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. **CC9-10RI5:** Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter). **CC9-10W2:** Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. **CC9-10W4:** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. **CC9-10W5:** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. **CC9-10W7:** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. **CC9-10W8:** Gather relevant information	Effective research includes strategies for gathering, organizing, selecting, evaluating, and presenting information.	What are the best strategies to use when researching information and writing a research paper? What is the best way to synthesize multiple sources of information to create an effective argument? <u>Learning Targets:</u> • Conduct short as well as more sustained research projects. • Synthesize multiple sources on a subject, demonstrating understanding of the subject under investigation. • Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively, and assessing the usefulness of each source. • Integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism, and following a standard format for citation. • Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. • Develop and strengthen writing as needed by	<u>Formative Assessments:</u> • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Summative Assessments:</u> **Social Studies Assessments:** Research presentation **ELA Assessment**: Research project assessed using a rubric

Standards Alignment	Unit Concept	Essential Questions Student Learning Targets	Assessments
from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation. **CC9-10W9:** Draw evidence from literary or informational texts to support analysis, reflection, and research **CC9-10W10:** Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences. **CC6SL4:** Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task. **CC9-10L1:** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. **CC9-10L2:** Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. **CC9-10L3:** Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening. **CC9-10L6:** Acquire and use accurately general academic and domain-specific		planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.	

Standards Alignment	Unit Concept	Essential Questions Student Learning Targets	Assessments
words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.			
Unit Four: Russian Literature **Timeline: 8 weeks**			
CC9-10RL3: Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme. **CC9-10RL5:** Analyze how an author's choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise. **CC9-10RI3:** Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them. **CC9-10RI.6:** Determine an author's point of viewor purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose. **CC9-10RI.7:** Analyze various accounts of a subject told in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account.	In the first part of this unit, students read short works by Pushkin, Gogol, Tolstoy, or Chekhov to be introduced to shared themes and literary devices. The class should read no more than three short works in four weeks, in order to devote adequate attention to each. At the end of the unit, teachers choose a novel to read as a seminal text, or opt for the short absurdist vignettes of Daniil Kharms. The literary reading in this part of the unit should be paired with historical readings. By the end of the unit, students begin to understand Russian literature from both a literary and a historical standpoint and will have a foundation for further reading and study.	Read works of Russian literature both for their intrinsic qualities and for their relation to the historical context. Analyze the motives, qualities, and contradictions of a character in Russian literature (including the narrator). Describe the effect of the narrative structure, pacing, and tone in a work of Russian literature. Analyze the role of utopian ideology in select works of Russian literature. Consider the impact of the Bolshevik Revolution and Communist rule on twentieth-century Russian writers and literature. Offer insightful inferences regarding the themes of the text. Create a clear, original, specific thesis statement. Organize concrete evidence and/or supporting textual details	<u>Formative Assessments:</u> • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Suggested Summative Assessments:</u> **Seminar and Essay:** How reliable is the narrator in the short story "The Nose"? What does the loss of the nose symbolize? Why does the author use the absurd in his writing? Use at least three pieces of textual evidence to support an original thesis statement. (CC9-10RL1, CC9-10RL4, CC9-10SL1, CC9-10W2, CC9-10W9) **Seminar and Essay:** What is the comment being made by "The Overcoat" on the characteristics of communism? Is the story of "The Overcoat" ironic?

Standards Alignment	Unit Concept	Essential Questions Student Learning Targets	Assessments
CC9-10W1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. **CC9-10W2:** Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. **CC9-10SL3:** Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence. **CC9-10L3:** Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.		to support a thesis statement. Use precise language, avoiding casual language and clichés. Write appropriate transitions to organize paragraphs. Apply new terminology to the texts. Analyze how historical events influence literature. Analyze how literary devices help convey theme.	How is the story of Akaki an example of carnivalesque? How is it an example of paranormal? Use textual evidence from chapter one of *Nikolai Gogol* (Vladimir Nabokov) and the short story itself. Write an essay that uses at least three pieces of textual evidence to support an original thesis statement answering one of these questions. (CC9-10RL1, CC9-10SL1, CC9-10W2, CC9-10W9) **Seminar and Essay:** Explore the spiritual and emotional changes of Ivan Ilyich in Tolstoi's *The Death of Ivan Ilyich* or of Dr. Ragin in Chekhov's "Ward No. 6." How and why does the main character change throughout the story? Use textual evidence to support your claims in a seminar. Write an essay using three to six pieces of textual evidence to support an original thesis statement. (CC9-10RL1, CC9-10RL2, CC9-10SL1, CC9-10W2, CC9-10W9) **Seminar and Essay:** Why does Dostoevsky's "Underground Man" reject the idea of the Crystal Palace? Use textual evidence to support your response. Write an essay using at least three textual details to support an original thesis statement. (CC9-10SL1, CC9-10W2, CC9-10W9, CC9-10SL3, CC9-10L3) **Seminar and Essay:** Discuss "A Slap in the Face of Public Taste" before and after learning the historical context. How do historical references affect your interpretation of the document? Refer to the literary and informational texts to support your response. Write an essay using at least three textual details to support an original thesis. (CC9-10RI6, CC9-10SL1, CC9-10W2, CC9-10W9) **Seminar and Essay:** How does the Bolshevik Revolution help us understand Blok's poem "The Twelve" (or another work of early twentieth-century Russian literature)? Use evidence from informational texts, as well as the poem itself. Write an essay using at least three pieces of textual evidence to support an

Standards Alignment	Unit Concept	Essential Questions Student Learning Targets	Assessments
			original thesis. (CC9-10RL6, CC9-10RI3, CC9-10SL1, CC9-10W2, CC9-10W9) **Oral Presentation:** Conduct and present researchon the life of one of the authors whose work you have read for this course. How have historical events affected the author's point of view? How does the author express his point of view through the use of a narrator? Cite at least three pieces of textual evidence to support an original thesis statement. (CC9-10SL4) **Oral Presentation:** Cite examples of narrative repetition or digression in one of the works you have read; comment on its significance in the story. (CC9-10RL5) **Speech:** Recite a favorite passage from one of the stories in this unit. Include an introduction that states from where it is excerpted, who wrote it, and its literary significance (CC9-10RL2, CC9-10L4, CC9-10SL6)

Curriculum Framework for Humanities/English 11

School: The Delaware Met **Curricular Tool:** Common Core Curriculum Maps[1] **Grade or Course** 11th

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
Unit One: The New World **Timeline : 4 weeks**			
CC11-12RL4: Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.) **CC11-12RL9:** Demonstrate knowledge of eighteenth-, nineteenth-, and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics. **CC11-12RI6:** Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text. **CC11-12W2:** Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. **CC11-12SL1:** Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. **CC11-12L.3:** Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to	This unit focuses primarily on the nonfiction prose—including sermons and diaries—and some poetry in the seventeenth and early eighteenth centuries. Students examine the works of some of the earliest settlers in various parts of the "new world." They consider the significance of the intersection of Native American, European, and African cultures. They explore whether conflicts were inevitable and how language and religion served as barriers and as bridges. Students look for emerging themes in American literature, such as the "new Eden" and the "American dream." Finally, art works from the period are examined for their treatment of similar	Identify emerging themes in early American literature. Explain the First Great Awakening and how it affected religious belief in Colonial America. Identify and explain elements of Puritan literature. Compare and contrast the experiences of America's earliest settlers, as revealed through the reading material. Explain the role of religion in early American life.	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records Suggested Summative Assessments: **Seminar and Essay:** "Does Anne Bradstreet's work typify or differ from the other Puritan literature that you have read?" Write an essay in which you use at least three pieces of textual evidence to support an original thesis statement. (CC11-12RL9, CC11-12W9, CC11-12SL1) **Seminar and Essay:** Select one passage from one of the poems and one from one of the informational texts that treat a similar theme. How are the themes

[1] Elements of this map are taken from the *Common Core Curriculum Maps in English Language Arts*, available at www.commoncore.org, accessed November 28, 2011.

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
comprehend more fully when reading or listening.	themes.		revealed in the different genres? What different techniques/literary devices do the authors use to convey theme? Write an essay in which you use at least three pieces of textual evidence to support an original thesis statement. (CC11-12RL2, CC11-12W2, CC11-12W9, CC11-12L5) **Seminar and Essay:** How could contemporary Americans approaches to religion be traced to Puritan origins? Write an essay in which you use at least three pieces of textual evidence to support an original thesis statement. (CC11-12RI4, CC11-12RI9, CC11-12W2) **Classroom Activity, Essay or Seminar Question:** View a staged or film version of *The Crucible.* Discuss the question "Is John Proctor a tragic figure? Why or why not?" Compare him to other tragic figures studied in grade 9, such as Oedipus Rex. Write an essay in which you use at least three pieces of textual evidence to support an original thesis statement. (CC11-12RL3, CC11-12RL7) **Speech:** Select a one to two minute passage from one of the texts and recite it from memory. Include an introduction that states what the excerpt is from, who wrote it, and why it exemplifies Puritan literature. (CC11-12RL9, CC11-12SL6)
Unit Two: A New Nation **Timeline: 4 weeks**			
CC11-12 RL4: Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. **CC11-12RI5:** Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or	Building on the themes explored in unit one, students trace the movement towards revolution and the colonists' desire to establish a new government, noting the differences in opinions	Identify defining themes in American literature, such as American exceptionalism. Identify and explain the historic and literary significance of America's founding	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
argument, including whether the structure makes points clear, convincing, and engaging. **CC11-12RI.8:** Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., The Federalist, presidential addresses). **CC11-12RI9:** Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights, and Lincoln's Second Inaugural Address) for their themes, purposes, and rhetorical features. **CC11-12W1:** Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. **CC11-12SL4:** Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range or formal and informal tasks. **CC11-12L1:** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	between federalists and anti-federalists and how the arguments were made. Students compare the radical purpose and tone of the *Declaration of Independence* to the measured and logical tone of the Preamble to the Constitution. They will analyze the expression of conflict between colonists and the British government, between colonists and Native Americans, and between colonists and slaves. They will begin to recognize the emerging theme in American literature of "American exceptionalism." Art works from the period will be examined for their treatment of similar themes.	documents. Analyze how tone is established in persuasive writing. Analyze the use of literary elements in persuasive writing. Compare and contrast points of view on related issues. Analyze the qualities of an effective argument (i.e., examine the truthfulness and validity of the argument, as well as its rhetorical devices). Apply knowledge of effective arguments when writing one of your own.	• Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Suggested Summative Assessments:</u> **Essay:** Imagine that you are an early American colonist. Write a letter to a family member or friend persuading him or her to join your fight for American independence. Use at least three pieces of textual evidence to support an original thesis statement. (CC11-12W1, CC11-12W9b) **Essay:** Write essay in which you explain Madison's use of the term "faction" in *Federalist* No. 10. Use at least three pieces of textual evidence to support an original thesis statement. (CC11-12RI4, CC11-12W2, CC11-12W9b) **Seminar and Essay:** Do The Declaration of Independence and The Constitution share similar tones? Why or why not? Use at least three pieces of textual evidence to support an original thesis statement. (CC11-12RI9, CC11-12W9b, CC11-12SL1) **Research Paper:** Select one of the texts studied and write a research paper in which you trace the enduring significance of the work through contemporary American history. Cite at least three secondary sources to support an original thesis statement. (CC11-12W7, CC11-12W8, CC11-12W9). **Oral Presentation:** Students will prepare and give a formal oral presentation of the research paper,

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
			fielding questions from peers. (CC11-12SL3, CC11-12SL4)
Unit Three: American Romanticism **Timeline: 3 weeks**			
CC11-12RL2: Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text. **CC11-12RL9:** Demonstrate knowledge of eighteenth-, nineteenth-, and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics. **CC11-12RI5:** Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging. **CC11-12W3:** Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. **CC11-12SL4:** Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range or formal and informal tasks. **CC11-12L4:** Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 11–12 reading and content, choosing flexibly from a range of strategies.	Students explore this period as America's first prolific one of literature, by examining works from Cooper and Irving to Hawthorne, Melville, Poe, Whitman, Emerson, and Thoreau. The prominent theme during this period in American literature of "manifest destiny" may be introduced by reading John O'Sullivan's essay "Annexation." Students will wrestle with how the romantics perceive individualism and how this focus on individualism relates to other themes in American literature. Transcendentalism is explored as an aspect of American romanticism and students should compare the "romantics" with the "transcendentalists." Teachers are encouraged to select one novel and a variety of the other poetry and prose in order to give students	Define the major characteristics of American romanticism (e.g., use of symbols, myth, and the "fantastic"; veneration of nature, celebration of the "self," isolationism). Define transcendentalism as an aspect of American romanticism and explain how it differs from it. Trace characterization techniques in American romantic novels. Analyze the structure and effectiveness of arguments in transcendentalist essays studied.	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records Suggested Summative Assessments: **Essay:** Write a narrative essay in the style of *Walden*. (CC11-12W3, CC11-12W9) **Seminar and Essay:** Agree or disagree with this Emerson quote: "What is popularly called Transcendentalism among us, is Idealism; Idealism as it appears in 1842." Use at least three pieces of textual evidence to support an original thesis statement. (CC11-12RI2, CC11-12SL6, CC11-12W9) **Seminar and Essay:** Select one of the short stories and explain why you think it is a good example of American romanticism. Use at least three pieces of textual evidence to support an original thesis

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
	maximum exposure to the various works of the period.		statement. (CC11-12RL1, CC11-12RL9, CC11-12W2, CC11-12SL1) **Oral Commentary:** Students will be given an unseen passage from one of the other works by Hawthorne or Melville (teacher's choice) and asked to provide a ten-minute commentary on two of the following questions: • What is the primary significance of this passage? • Identify the poetic techniques used in this poem (or extract from a poem). Relate them to the content. • Which poetic techniques in this poem or extract from a poem are typical of the writer? • What are the effects of the dominant images used in this extract? • What do you think the important themes in this extract are? (CC11-12RL1, CC11-12SL4, CC11-12SL6)
Unit Four: A Troubled Young Nation **Timeline: 5 weeks**			
CC11-12RL3: Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed). **CC11-12RI3:** Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text. **CC11-12W5:** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. (Editing	The range and depth of potential topics covered in this hefty unit might be tailored to suit various classroom populations. Building on the previous unit in which individualism figures as a prominent theme in American romanticism and transcendentalism, this unit explores the expanding idea of the American individual and the related idea of the pursuit of liberty in various	Determine and analyze the development of the theme or themes in American literature of the nineteenth century (e.g., freedom, the American dream, racism, regionalism, survival, "individual vs. society," and "civilized society" vs. the wilderness). Compare the treatment of related themes in different genres (e.g., *The Adventures of*	<u>Formative Assessments:</u> • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs,

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
for conventions should demonstrate command of Language standards 1–3 up to and including grades 11–12 on page 54.) **CC11-12SL2:** Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. **CC11-12L2:** Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	forms.	*Huckleberry Finn* and *Narrative of the Life of Frederick Douglass, an American Slave*). Explain how characters in fictional in late nineteenth century America express the challenges facing America at the time, citing both textual evidence from both fiction and nonfiction to make the case.	anecdotal records <u>Suggested Summative Assessments:</u> **Essay and Seminar:** Write an essay in which you agree or disagree with the following statement, offering at least three pieces of evidence from the texts to support an original thesis statement: "Women in nineteenth century America could not really be free." (CC11-12RL1, CC11-12W1) **Essay and Seminar:** Choose two women from among the works studied and compare and contrast their life experiences, noting the ways in which they either exemplified or were an exception to the times in which they lived. Use at least three pieces of evidence from the texts to support an original thesis statement. (CC11-12RL1, CC11-12RI10, CC11-12W1, CC11-12W9) **Essay and Seminar:** "Does Huckleberry Finn embody the values inherent in the American Dream?" Write an essay in which you use at least three pieces of evidence to support an original thesis statement. (CC11-12RL9, CC11-12SL1, CC11-12W9) **Essay and Seminar:** How does Twain address the issue of slavery in *The Adventures of Huckleberry Finn*. Use at least three pieces of textual evidence to support an original thesis statement. (CC11-12RL6, CC11-12W2, CC11-12W9) **Speech:** Recite "The Gettysburg Address" from memory. Include an introduction that discusses why the excerpt exemplifies America's core conflicts and its finest values. (CC11-12RI9, CC11-12SL3) **Oral Presentation:** Create a multimedia presentation that summarizes one of the novels you've read and present questions that you think the novel raises about its uniquely American

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
			themes. (CC11-12RL1, CC11-12W6, CC11-12SL5)
SOCIAL STUDIES INTEGRATION: Historical Research **ELA CONCEPT: Research** **Timeline: 5 weeks**			
CC11-12RI2: Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text. **CC11-12RI7:** Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem. **CC11-12W4:** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. **CC11-12W5:** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. **CC11-12W6:** Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information. **CC11-12W7:** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. **CC11-12W8:** Gather relevant information from multiple authoritative print and digital sources, using	Effective researchers start with a clear purpose, topic, and audience when doing research. Effective researchers have a toolbox of strategies that help them organize, select, and evaluate information. Effective research writers synthesize and interpret information in a documented research paper. Effective researchers present information without plagiarizing.	What are effective research strategies and how do I apply those strategies to my own research? How do I compose an effective research paper and present my research for an audience? <u>Learning Targets:</u> • Select and research a topic • Evaluate sources • Take effective notes • Create source cards and paraphrase and summarize information, avoiding plagiarism • Compose a research paper, using proper formatting, and proper documentation of sources • Present research topic for an audience	<u>Formative Assessments:</u> • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Suggested Summative Assessments:</u> **Social Studies Assessment:** A process paper and annotated bibliography based upon a research topic for National History Day. **English Assessment:** A research project which includes a paper, product, and presentation. Project assessed using a rubric.

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. **CC11-12W9:** Draw evidence from literary or informational texts to support analysis, reflection, and research. **CC11-12W10:** Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences. **CC11-12SL2:** Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. **CC11-12SL4:** Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks. **CC11-12SL5:** Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. **CC11-12SL6:** Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate. **CC11-12L1:** Demonstrate command of the conventions of standard English grammar and usage when writing or			

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
speaking. **CC11-12L2:** Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. **CC11-12L3:** Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.			
SOCIAL STUDIES INTEGRATION: Changing Interpretations of Reconstruction **ELA CONCEPT: Persuasion** **Timeline: 3 weeks**			
CC11-12RI3: Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text. **CC11-12RI5:** Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging. **CC11-12RI6:** Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text. **CC11-12RI8:** Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., The Federalist, presidential addresses). **CC11-12W1:** Write arguments to support claims in an analysis of substantive topics or texts, using valid	A writer's and reader's point of view is influenced by his experience. Reading like a writer will help a writer to understand the rhetorical devices and organization of text when writing. Persuasive texts defend a position, consider an opposing side, and lead readers to adopt or consider the writers' views. Everyone is entitled to an opinion about what a text means, but the text supports some interpretations more than others.	What are the essential elements of effective persuasive argumentation? How do I persuade readers to take action? How can analyzing persuasive texts help me better understand and appreciate what I read? <u>Learning Targets:</u> • Analyze a persuasive essay and speech exemplar for key traits of persuasive presentations • Apply the writing process to a persuasive essay and speech • Compose and present a persuasive	<u>Formative Assessments:</u> • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Suggested Summative Assessments:</u> **Social Studies Assessment:** Interpretation of historical documents **English Assessment:** Persuasive essay and speech assessed using a rubric.

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
reasoning and relevant and sufficient evidence. **CC11-12W4:** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. **CC11-12W5:** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. **CC11-12W8:** Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. **CC11-12W9:** Draw evidence from literary or informational texts to support analysis, reflection, and research. **CC11-12SL2:** Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. **CC11-12SL4:** Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks. **CC11-12SL5:** Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of		speech with attention to audience and purpose	

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
findings, reasoning, and evidence and to add interest. **CC11-12L1:** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. **CC11-12L2:** Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. **CC11-12L3:** Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.			
Unit Five: Emerging Modernism **Timeline: 4 weeks**			
CC11-12RL1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. **CC11-12RL6:** Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text. **CC11-12RI1:** Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. **CC11-12W4:** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.) **CC11-12SL5:** Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive	This unit traces the emergence of American modernism, including some literature from World War I, and tracks the literature of "disillusionment" that followed the war. Students explore Robert Frost's vision of nature as modernist rather than transcendental in its perspective. They identify the alienation of the modern man and the tensions that are embedded in the modernist works of F. Scott Fitzgerald and Ernest Hemingway. The works of Countee Cullen, Langston Hughes, and Zora Neale Hurston illustrate the	Define and explain the origins of the Harlem Renaissance. Explore the relationship between historical events and literature as they emerge in the works of Harlem Renaissance poets and authors. Define and explain "The Lost Generation," noting experimental aspects of some works. Note the relationship between themes in early twentieth century American literature and nineteenth century American thought. Identify modernist ideas	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records Suggested Summative Assessments: **Seminar and Essay:** What are the effects of the shifting point of view on the reader's understanding of events in *As I Lay Dying*. Why do you think

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. **CC11-12L6:** Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.	breadth of the Harlem Renaissance literary movement. Informational and critical texts enrich the students' analysis of the texts.	(using the informational text). Analyze the relationship between modernist style and content. Examine evidence of the alienation of "modern man."	Faulkner chose to tell the story from different points of view? Use at least three pieces of textual evidence to support an original thesis. (CC11-12RL3, CC11-12RL5, CC11-12W2, CC11-12W9a, CC11-12L5) **Seminar and Essay:** Agree or disagree with the following statement: "Prufrock and Gatsby have similar characters." Use at least three pieces of textual evidence to support an original thesis. (CC11-12RL1, CC11-12RL5, CC11-12SL4, CC11-12W9a) **Seminar and Essay:** After reading James Baldwin's essay, "If Black English Isn't a Language, Then Tell Me, What Is?" and Zora Neale Hurston's *Their Eyes Were Watching God*, discuss the pivotal role that dialect plays in *Their Eyes Were Watching God.* Use at least three pieces of textual evidence to support an original thesis. (CC11-12RL1, CC11-12RL4, CC11-12RL6, CC11-12RL9, CC11-12SL4, CC11-12W9a) **Multimedia Presentation:** Make a formal multimedia presentation in which you define and discuss "The Lost Generation" in American literary history. Cite at least three sources. (CC11-12RL9, CC11-12W6, CC11-12SL5) **Oral Presentation:** Discuss what you think Learned Hand meant when he said of Americans, "For this reason we have some right to consider ourselves a picked group, a group of those who had the courage to break from the past and brave the dangers and the loneliness of a strange land." Cite examples from works read in this unit and describe how the characters exhibit this quality. (CC11-12RL9, CC11-12SL4, CC11-12L5)

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
SOCIAL STUDIES INTEGRATION: Migration Patterns **ELA CONCEPT: Comparing and Contrasting Texts** **Timeline: 3 weeks**			
CC11-12RI2: Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text **CC11-12RI3:** Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text. **CC11-12RI5:** Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging. **CC11-12RI6:** Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text. **CC11-12RI8:** Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., The Federalist, presidential addresses). **CC11-12W2:** Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. **CC11-12W4:** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. **CC11-12W5:** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is	Noticing similarities and differences helps readers to develop deeper understanding of what is being studied.	How will comparing and contrasting texts help me develop a deeper understanding of what I read? <u>Learning Targets:</u> • Analyze a compare and contrast essay exemplar that reflects key traits of comparison-contrast essays. • Apply the writing process to a compare/contrast essay. • Plan and present an oral interpretation of poetry.	<u>Formative Assessments:</u> • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Suggested Summative Assessments:</u> **Social Studies Assessment:** Letter to a Congressman taking a side in support or opposition of the Chinese Exclusion Act. **English Assessment:** Students will write a comparison and contrast essay about two poems and deliver an oral interpretation of a poem. Both the essay and the oral interpretation will be assessed using a rubric.

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
most significant for a specific purpose and audience. **CC11-12W8:** Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. **CC11-12W9:** Draw evidence from literary or informational texts to support analysis, reflection, and research. **CC11-12SL2:** Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. **CC11-12SL4:** Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range or formal and informal tasks. **CC11-12SL5:** Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. **CC11-12SL6:** Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate. **CC11-12L1:** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. **CC11-12L2:** Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. **CC11-12L3:** Apply knowledge of language to			

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.			
SOCIAL STUDIES INTEGRATION: Analyzing Historical Data **ELA CONCEPT: Literary Analysis** **Timeline: 2 weeks**			
CC11-12RL1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. **CC11-12RL2:** Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text. **CC11-12RL3:** Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed). **CC11-12RL4:** Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. **CC11-12RL5:** Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact. **CC11-12RL6:** Analyze a case in which grasping point	Analyzing how authors use literary elements gives readers a deeper appreciation and understanding of what they read. Different readers may respond to the same text in different ways. The better responses are those that provide that provide greater insight into the text and/or the issues raised. Everyone is entitled to an opinion about what a text means, but the text supports some interpretations more than others.	What techniques do writers use to analyze texts? How can analyzing texts help me better understand and appreciate what I read? Learning Targets: • Analyze the traits of an effective literary analysis • Apply the writing process to a literary analysis	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records Suggested Summative Assessments: **Social Studies Assessment:** Evaluate a conflict **English Assessment:** Literary analysis assessed using a rubric.

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement). **CC11-12W2:** Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. **CC11-12W4:** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. **CC11-12W5:** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. **CC11-12W8:** Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. **CC11-12W9:** Draw evidence from literary or informational texts to support analysis, reflection, and research. **CC11-12SL2:** Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. **CC11-12SL4:** Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are			

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range or formal and informal tasks. **CC11-12SL5:** Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. **CC11-12L1:** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. **CC11-12L2:** Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. **CC11-12L3:** Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.			
Unit Six: Challenges and Successes of the Twentieth Century **Timeline: 6 weeks**			
CC11-12RL5: Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact. **CC11-12RL7:** Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist.) **CC11-12RI2:** Determine two or more central ideas of a text and analyze their development over the course	It includes a few titles from the twenty-first century as well. The unit traces the flourishing of the American short story and the development of the novel and dramas since World War II. Students will read masters of the southern short story—writers like Eudora Welty and Flannery O'Connor. The unit also explores works by Richard Wright and Ralph Ellison, whose texts expose	Analyze the development of the short story in post-World War II America. Trace the development of the "southern gothic" tradition in American literature. Distinguish between the two distinct views within the African-American literary tradition as represented by Richard Wright and Ralph	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs,

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text **CC11-12W2:** Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. **CC11-12SL3:** Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used. **CC11-12L5:** Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. • Interpret figures of speech (e.g., hyperbole, paradox) in context and analyze their role in the text. • Analyze nuances in the meaning of words with similar denotations.	tensions within the emerging African American literary tradition. The 1960s are rich with both informational and literary works mirroring profound cultural shifts in the American landscape. This unit also emphasizes how the changing political landscape, including the words of leaders like John Fitzgerald Kennedy and Ronald Reagan, shaped the world in which we live.	Ellison. Explore the nature of African-American literature during the civil rights movement following World War II. Recognize the emergence of dynamic views represented in literary texts by first- and second-generation Americans. Explain how the "Beat Generation" challenges traditional forms and subjects in literature. Identify multiple postmodernist approaches to critical analysis of literature. Note the influence that postmodernism has had on the "common reader."	anecdotal records <u>Suggested Summative Assessments:</u> **Seminar and Essay:** Discuss the characterization techniques authors use to create Huckleberry Finn, Jay Gatsby, and John Grady Cole. How are they the same? How are they different? Are some more effective than others? Why? Use at least three pieces of evidence to support your original thesis statement. (CC11-12RL3, CC11-12W2, CC11-12SL1, CC11-12L5) **Seminar and Essay:** Compare a scene from the 1951 film of *A Streetcar Named Desire* with the same scene in the 1995 film or a stage performance. Do you think the film or stage production is faithful to the author's intent? Why or why not? Cite at least three pieces of evidence to support an original thesis statement. (CC11-12RL7, CC11-12W2, CC11-12SL1) **Seminar and Essay:** "How do Willy Loman and Tommy Wilhelm contend with being 'nobody'?" Cite at least three pieces of evidence to support an original thesis statement. (CC11-12RL9, CC11-12W2, CC11-12SL1, CC11-12W9a) **Oral Presentation:** Play recordings of two of the poets reading their work. Make a presentation to the class about how their reading influences one's interpretation of the poem (e.g., tone, inflection, pitch, emphasis, pauses, etc.). (CC11-12RL4, CC11-12W6, CC11-12SL4, CC11-12SL5, CC11-12SL6) **Research Paper:** Write a research paper in which you trace the influence of World War II on American literature. Cite at least three pieces of textual evidence and three secondary sources to support your original thesis statement. (CC11-

Standards Alignment	Unit Concepts	Essential Questions/Student Learning Targets	Assessments
			12RL1, CC11-12W7, CC11-12W8, CC11-12W9) **Oral Commentary:** Students will be given an unseen passage from a contemporary novel, poem, or short story and asked to provide a ten minute commentary on two of the following questions: • What are the effects of the dominant images uses in this extract? • Identify the poetic techniques used in this poem (or extract from a poem). Relate them to the content. • What do you think the important themes in this extract are? (CC11-12RL1, CC11-12RL4, CC11-12SL4)

Curriculum Framework for Humanities/English 12[1]

School: The Delaware Met **Curricular Tool:** Common Core Curriculum Maps[2] **Grade or Course** 12th

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
Unit One: European Literature in the Middle Ages **Timeline : 4 weeks**			
CC11-12RL5: Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact. **CC11-2RI2:** Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text. **CC11-12W1(a-e):** Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. **CC11-12SL4:** Present information, findings, and supporting evidence, conveying a clear and distinct	Although the Middle Ages often is characterized as a period of darkness, the literature and art of the time typically suggest a more complex picture. Through a combination of close reading and exposure to an array of texts, students observe how satire reveals some of the contradictions and divergences within medieval literature and will draw connections between literary form and philosophy. In addition, they consider how certain traits of medieval literature can also be found in the art of the period: for instance, how characters have symbolic meaning both in literature and in iconography.	Consider how medieval literature exhibits many tendencies rather than a single set of characteristics. Observe literary elements (e.g., allegory, farce, satire, foil) in medieval literary works and identify characteristics of medieval literary forms. Understand how literary elements contribute to meaning and author intention. Consider glimpses of the Renaissance in certain works of medieval literature and art. Consider how medieval literary and artistic forms reflect the writers' and artists' philosophical views. Examine the literary,	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records Suggested Summative Assessments: **Seminar and Essay:** Compare and contrast *Sir Gawain and the Green Knight* and "The Knight's Tale." What are the qualities of the ideal knight? Do they differ at all? Use textual evidence from both texts to support an original, concise thesis. (CC11-12RL1, CC11-12RL3, CC11-12SL1, CC11-12SL4, CC11-12W2) **Seminar and Essay:** Choose one of the *Canterbury Tales*. Explain how the main character shows his or her personality through narration. How do fabliaux reveal the point of view of the character? Use textual evidence to support an original, concise thesis statement. (CC11-12RL5, CC11-12RI2, CC11-12SL1, CC11-12SL4, CC11-12W2)

[1] This map does not reflect integrated units with social studies.
[2] Elements of this map are taken from the *Common Core Curriculum Maps in English Language Arts*, available at www.commoncore.org, accessed November 28, 2011.

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range or formal and informal tasks. **CC11-12L3(a):** Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.		social, and religious satire in Chaucer's *Canterbury Tales*. Consider the role of the framed narrative in Chaucer's *Canterbury Tales*, Dante's *Inferno*, and other works. Compare works of medieval literature and art, particularly their depiction of character and their focus on the otherworldly.	**Seminar and Essay:** Compare "The Monk's Tale" in *The Canterbury Tales* with Dante's story of Ugolino in Cantos XXXII-XXXIII of the *Inferno*, paying special attention to depiction of character. Use at least one critical source. Use textual evidence to support an original, concise thesis statement. (CC11-12RL3, CC11-12SL1, CC11-12SL4, CC11-12W2, CC11-12W7, CC11-12L3) **Seminar and Essay:** Is the Wife of Bath from *A Canterbury Tales* a feminist? Use textual evidence to support an original, concise thesis. (CC11-12RL1, CC11-12RL3, CC11-12SL1, CC11-12SL4, CC11-12W2) **Seminar and Essay:** Discuss "The Pardoner's Tale" as a satire. What, exactly, is being literally described versus being satirized? Why does Chaucer use satire? Is Chaucer satirizing human nature or the church as an establishment? Use textual evidence to support an original, concise thesis statement. (CC11-12RL1, CC11-12RL3, CC11-12RL5, CC11-12SL1, CC11-12SL4, CC11-12W2) **Essay:** Draw parallels between representations of character in a medieval play and in medieval icons. Compare and contrast their similarities and differences. Are they more alike or different? Use concrete evidence from both texts to support an original, concise thesis statement. (CC11-12RL1, CC11-12RL3, CC11-12W2) **Seminar and Essay:** Explain how Saint Augustine attempts to resolve a paradox in Book XI of the *Confessions*. Is his resolution convincing? Why or why not? (CC11-12RI5, CC11-12W1, CC11-12SL1, CC11-12SL3) **Seminar and Essay:** Read Augustine's Book XI of the *Confessions*. Agree or disagree with Augustine's idea: "Evil stems not from God but from a perversion of human will." Use textual evidence to support an original, concise thesis statement. (CC11-12RI5, CC11-12W1, CC11-12SL1, CC11-12SL3) **Speech:** Select one of the poems from this unit and recite it from memory. Include an introduction that states: • What the excerpt is from; • Who wrote it; • Why it exemplifies the medieval period. (CC11-12SL4) **Seminar and Essay:** "To what degree does medieval literature regard

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
			human existence as secondary to the divine?" Use textual evidence from one of the texts read in this unit to support an original, concise thesis statement. (CC11-12RL2, CC11-12W1, CC11-12SL1, CC11-12SL3) **Seminar and Essay:** Boccaccio's *The Decameron* alludes to Dante's allegorical model. Why does he satirize Dante's allegorical model? What is revealed by this satire? Is Boccaccio enlightened and, therefore, a man ahead of this time? Use textual evidence from both texts to support an original, concise thesis statement. (CC11-12RL1, CC11-12RL3, CC11-12RL6, CC11-12RL5, CC11-12SL1, CC11-12SL4, CC11-12W2) **Seminar and Essay:** Read Dante's *Inferno*. How does the allegory reveal the values of the Middle Ages? What sins are punished most severely and why? Do you agree with the hierarchical circles of hell Dante creates? Use textual evidence to support an original, concise thesis statement. (CC11-12RL1, CC11-12RL3, CC11-12RL6, CC11-12RL5, CC11-12SL1, CC11-12SL4, CC11-12W2) **Research Paper:** Does the term "dark ages" accurately describe the Middle Ages? Use primary and secondary sources from this unit or outside of the unit to support an original, concise thesis statement to answer the question. (CC11-12RL1, CC11-12W1, CC11-12W7, CC11-12W8) **Research Paper:** Answer the essential question: "How does medieval literature suggest a preoccupation with both divine and earthly existence?" Use primary and secondary sources from this unit or outside of the unit to support an original thesis statement to answer the question. (CC11-12RL1, CC11-12W1, CC11-12W7, CC11-12W8)
SOCIAL STUDIES INTEGRATION: Pandemics **ELA CONCEPT: Collaborative Perspective Writing** **Timeline: 2 weeks**			
CC11-12RI7: Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or	Effective researchers start with a clear purpose, topic, and audience when doing research. Effective researchers have a toolbox of strategies that	What are effective research strategies and how do I apply those strategies to my own research? How do I compose an	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
solve a problem. **CC11-12W4:** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. **CC11-12W5:** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. **CC11-12W6:** Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information. **CC11-12W7:** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. **CC11-12W8:** Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text	help them organize, select, and evaluate information. Effective research writers synthesize and interpret information in a documented research paper. Effective researchers present information without plagiarizing An effective writer of historical non-fiction will use research strategically.	effective research paper and present my research for an audience? How do I effectively combine the harsh realities of life in the middle ages with the romanticism of popular stories about the time period. <u>Learning Targets:</u> • Select and research a topic • Evaluate sources • Take effective notes • Create source cards and paraphrase and summarize information, avoiding plagiarism • Compose a research paper, using proper formatting, and proper documentation of sources • Present research topic for an audience	• Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Summative Assessments:</u> **Social Studies Assessment:** A multimedia presentation that includes historical patterns of responses to pandemics **English Assessment:** Students will write an historical fiction short story. Students will assume the context of a small town in France during an outbreak of the Bubonic Plague. After doing research they will brain storm a list of characters who live in the town and write a story about their experience. These will be compiled into a frame story about the plague that comes from varied perspectives (similar to *Canterbury Tales).*

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. **CC11-12W9:** Draw evidence from literary or informational texts to support analysis, reflection, and research. **CC11-12SL2:** Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. **CC11-12SL6:** Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate. **CC11-12L1:** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. **CC11-12L2:** Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. **CC11-12L3:** Apply knowledge of language to understand how language functions in different contexts, to make effective choices			

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
for meaning or style, and to comprehend more fully when reading or listening.			
Unit Two: European Literature during the Renaissance and Reformation **Timeline: 5 weeks**			
CC11-12RL4: Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.) **CC11-12RL6:** Analyze a case in which grasping point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement). **CC11-12RI1:** Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. **CC11-12RI2(a-f):** Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective	Students consider Renaissance writers' interest in ancient Greek and Latin literature and myth; their preoccupation with human concerns and life on earth; their aesthetic principles of harmony, balance, and divine proportion; and exceptions to all of these. This leads to a discussion of how literary forms themselves reflect religious, philosophical, and aesthetic principles. As students compare the works of the Renaissance with those of the Middle Ages, students recognize the overlap and continuity of these periods. In addition, they consider how the outstanding works of the era transcend their time and continue to inspire readers and writers. The English Renaissance of the seventeenth century includes additional works by William Shakespeare. In	Read novels, literary nonfiction, stories, plays, and poetry from the Renaissance era, observing the continuity from the Middle Ages as well as the departures. Identify and investigate allusions to classical literature in Renaissance texts. Explore how a concept such as symmetry or divine proportion is expressed both in literature and in art. Discuss Renaissance conceptions of beauty and their literary manifestations. Explore how Renaissance writers took interest in human life and the individual person. Explore the playful,	<u>Formative Assessments:</u> • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Suggested Summative Assessments:</u> **Seminar and Essay:** Read *Macbeth*. How does the play illustrate the demise of the Great Chain of Being? What does the play say about the divine right of kings? What does it reveal about fate and free will? Use textual evidence from the play to support your response in an original, concise thesis statement. (CC11-12RL1, CC11-12RI1) **Seminar and Essay:** Read *Macbeth* and excerpts from*The Prince* by Machiavelli. How do Machiavelli's principles apply to the play? What is Shakespeare saying about Machiavelli's approach to attaining and maintaining political power? Consider the quote "it is better to be feared than to be loved." Is this true for Macbeth? Use textual evidence from both texts to support an original, concise thesis statement. (CC11-12RL1, CC11-12RI1) **Seminar and Essay:** Read *Henry IV, Part I.* How does Falstaff reflect the new ideas of the Renaissance regarding chivalry and honor? How

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summary of the text. **CC11-12W2:** Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. **CC11-12SL4:** Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range or formal and informal tasks. **CC11-12L4(a-d):** Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grades 11–12 reading and content*, choosing flexibly from a range of strategies.	their essays, students may analyze the ideas, principles, and form of a literary work; discuss how a work bears attributes of both the Middle Ages and the Renaissance; discuss convergences of Renaissance literature and arts; or pursue a related topic of interest.	satirical, irreverent aspects of Renaissance literature—in particular, the writing of Rabelais, Boccaccio, and Shakespeare. Consider how literary forms and devices reflect the author's philosophical, aesthetic, or religious views. Write an essay in which they (a) compare a literary work with a work of art; (b) compare a Renaissance work with a medieval work; or (c) relate a literary work to a philosophical work.	does the play illustrate the demise of the Great Chain of Being? What does the play say about the divine right of kings? Use textual evidence from the play to support your response in an original, concise thesis statement. (CC11-12RL1, CC11-12RI1) **Seminar and Essay:** Relate Pacioli's *On the Divine Proportion* to a Shakespeare sonnet.In what ways is the sonnet an expression of divine proportion (or not)? Cite specific evidence from both texts to support an original, concise thesis statement. (CC11-12RL1, CC11-12RI1) **Seminar and Essay:** Compare one of the satirical stories of *Canterbury Tales* (from unit one) with one of the stories from Boccaccio's *The Decameron*. What does the satire reveal about the author's intention and message? Use textual evidence to support an original, concise thesis. (CC11-12RL2) **Seminar and Essay:** Show how one of the plays from this unit departs from the medieval conceptions of drama. Use specific textual evidence to support an original, concise thesis statement. (CC11-12RL1, CC11-12RI1) **Speech:** Select a poem from this unit and recite it from memory. Include an introduction that states: • Who wrote the poem; • Its form, meter, rhyme scheme, and key literary elements; • An aspect of the poem that comes through after multiple readings. (RL.11-12.4) **Seminar and Essay:** Using works of art as textual evidence, do **one** of the following: (a) compare a literary work from this unit with a Renaissance work of art, with attention to principles of proportion and symmetry; (b) compare a Renaissance literary work with a medieval work, with attention to depiction of character; or (c) relate a literary work to a philosophical work. Include at least one critical source and one reference work to support an original, concise thesis statement. (CC11-12RL4, CC11-12W7) **Research Paper:** Using texts from this unit as well as additional sources, explain how literature or works of art from the Renaissance break with or build on ideas derived from the Middle Ages. Cite specific textual evidence to support an original, concise thesis statement to answer the essential question. (CC11-12RL4, CC11-12W7, CC11-

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			12W8) **Research Paper:** Using texts from this unit as well as additional sources, explain how literature or works of art from the Renaissance reveal this period to actually be an age of intolerance. Cite specific textual evidence to support an original, concise thesis statement to answer the essential question. (CC11-12RL4, CC11-12W7, CC11-12W8)
Unit Three: European Literature in the Seventeenth Century **Timeline: 5 weeks**			
CC11-12RL1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. **CC11-12RL7:** Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist.) **CC11-12RI3:** Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text. **CC11-12RI4:** Determine the meaning of words and phrases as	Students gain understanding of the early Enlightenment and its conception of reason. They see another side of the thought and literature of this period: an emphasis on human emotion, irrationality, and paradox. They consider how certain works express tension or conflict between emotion and reason while others present reason and emotion as complementary and interdependent. They will write a critical essay exploring an aspect of the conflict between reason and emotion.	Read literary and philosophical works from the seventeenth century, with particular attention to questions of reason and emotion. Consider the idea of reading literature as a quest—for truth, for beauty, and for understanding. Analyze two philosophical works of the seventeenth century for their treatment of an idea related to human reason. Write literary and philosophical analyses with a focus on clarity and precision of expression. Conduct research, online and in libraries, on a particular seventeenth-	<u>Formative Assessments:</u> • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Suggested Summative Assessments:</u> **Seminar and Essay:** Analyze "The Flea." Why is it considered metaphysical poetry? How does it use irony to convey its message? Is it a poem of logic or of emotion? Use textual evidence to discuss and write or original, concise thesis statement. (CC11-12W5, CC11-12W7) **Seminar and Essay:** Read *The Pilgrim's Progress*. Consider the text as an allegory. What themes do the characters represent? How do these characters work together to create an allegory? What does the allegory reveal about Bunyun's point of view on religious ideas of the seventeenth century? Use textual evidence from the novel to support an

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines "faction"in *Federalist No. 10*). **CC11-12RI6:** Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text. **CC11-12W4:** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.) **CC11-12W5:** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. **CC11-12SL2:** Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in		century author, work, or idea. Analyze the relationship between reason and emotion as illustrated in literature of the seventeenth century. Understand the use of satire as a technique to reveal authorial intent.	original, concise thesis statement. (CC11-12W5, CC11-12W7) **Seminar and Essay:** Read *The Alchemist*. How does the plotline reveal satire? What values of this time period are being mocked? How does the author use satire to reveal his point of view? Use textual evidence from the play to support an original, concise thesis statement. (CC11-12W5, CC11-12W7) **Seminar and Essay:** Read *The Miser* by Molière. How does the plotline reveal satire? What values of this time period are being mocked? How does the satire reveal Molière's point of view? Use textual evidence from the play to support an original, concise thesis statement. (CC11-12W5, CC11-12W7) **Seminar and Essay:** Analyze Donne's "Holy Sonnet 10." Is the speaker of the poem pious or irreverent of the church's teachings? How does personification convey its message? Why is the poem considered metaphysical? Cite specific textual evidence from the poem to support an original, concise thesis. (CC11-12W5, CC11-12W7) **Seminar and Essay:** Read Donne's "Song: Goe, and catche a falling starre." Is the point of view a cynical one? Or is its point of view realistic? Does it build upon religious views or does it depart from church teachings? How does emotion affect the logic of the speaker? Use textual evidence to support an original, concise thesis statement. (CC11-12W5, CC11-12W7) **Seminar and Essay:** Compare and contrast Donne's "Song Goe, and catche a falling starre" to Marvell's "To his Coy Mistress." How do emotion and logic affect the speaker's point of view in each poem? How does gender affect the author's attitudes? Use textual evidence to support an original, concise thesis statement. (CC11-12W5, CC11-12W7) **Seminar and Essay:** Read *Hamlet*. With special consideration to his soliloquies, is Prince Hamlet influenced by his sense of logic or sense of emotion? Use specific textual evidence to support an original, concise thesis statement. (CC11-12W5, W7) **Seminar and Essay:** Read *King Lear*. In the beginning of the play, is King Lear motivated by his sense of reason or by emotion? By the end of the play, how has King Lear resolved his emotional needs with his rational thought? Consider the same question for Edmund, Edgar,

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order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. **CC11-12L1(a-b):** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.			Regan, Goneril and/or Cordelia. Use textual evidence to support an original, concise thesis statement. (CC11-12W5, CC11-12W7) **Seminar and Essay:** Read excerpts of the *Leviathan*. Agree or disagree with Hobbes's assessment of human nature. Defend your opinion with specific textual evidence that supports an original, concise thesis. (CC11-12W1, CC11-12W5, CC11-12W7) **Seminar and Essay:** Read excerpts from *Don Quixote* and/or watch the film version of *Man of La Mancha*. Compare Don Quixote's outlook on life with those of another character, such as the priest. Use textual evidence citing either the novel or the film to support an original, concise thesis statement. (CC11-12RL1, CC11-12W5, CC11-12W7) **Seminar and Essay:** Analyze "To Daffodils,""To the Virgins Make Much of Time,"and "To His Coy Mistress." Compare the message and intention of each. Do these poems appeal to human emotion or human logic to convey their ideas? Use textual evidence from two or more poems to write a comparative essay. Be sure your thesis is specific, concise, and original. (CC11-12W5, CC11-12W7, CC11-12SL1, CC11-12SL2) **Speech:** Select a poem or excerpt from a longer poem and recite it from memory. Include an introduction that states what the excerpt is from, who wrote it, and what kind of poetry it exemplifies and why. (CC11-12SL6) **Research Paper:** Using multiple texts from this unit and additional sources, discuss how writers of the seventeenth century regard the relationship between reason and emotion. Include an original, concise thesis statement that directly answers this essential question. (CC11-12RL1, CC11-12RL2, CC11-12W7, CC11-12W8)
Unit Four: European Literature in the Eighteenth and Early Nineteenth Century **Timeline: 5 weeks**			
CC11-12RL2: Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and	Observing themes related to nature as well as "natural" forms and language, students consider whether nature appears as a	Read fiction, drama, poetry, biography, and autobiography from the eighteenth and early	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions

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build on one another to produce a complex account; provide an objective summary of the text. **CC11-12RL3:** Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed). **CC11-12RI5:** Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging. **CC11-12W3 (a-e):** Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. **CC11-12W7:** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. **CC11-12W8:** Gather relevant	force of good or a menace. Observing narrative digressions, idiosyncrasies, exaggerations, and biases, they consider human, unpredictable, idiosyncratic aspects of storytelling. They have the opportunity to practice some of these narrative techniques in their own fiction and nonfiction writing. Students also explore some of the philosophical ideas in the literary texts—questions of free will, fate, human conflict, and loss. In seminar discussion, students consider a philosophical question in relation to a particular text. Students write short essays and also develop an essay or topic from an earlier unit, refining the thesis and consulting additional sources. These essays can be used to inform and inspire longer research papers at the end of the unit that answer the essential question. By the end of this unit, students will have an appreciation for some of the tendencies of early Romanticism and will	nineteenth century. Consider the relationship between art and nature in these works. Observe narrative digressions, idiosyncrasies, exaggerations, and biases. Consider the dual role of the narrator as a character and as a storyteller. Consider the role of the supernatural in the literary works read in this unit. Write a story in which they practice some of the narrative devices they have observed in this unit. Explore and analyze some of the philosophical ideas in the literary texts—questions of free will, fate, human conflict, and loss. Consider the difference between natural and forced language, as explained by Wordsworth. Consider both the common tendencies of works of this period and the contradictions, exceptions, and outliers.	• Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Suggested Summative Assessments:</u> **Seminar and Essay:** Read selected poems from Blake's "*Songs of Innocence*." Consider biblical allusion to explain the relationship between Innocence and Paradise. Also, how is Experience a metaphor for the Fall of Man? Use textual evidence from the poems selected to create an original, concise thesis statement. (CC11-12RL1, CC11-12RL4, CC11-12W2, CC11-12SL1, CC11-12SL6) **Seminar and Essay:** How does Tennyson's *In Memoriam A.H.H.* use nature to express metaphorically human feelings and emotions? What point of view is Tennyson revealing? Use textual evidence from the poem to support an original, concise thesis statement in an essay. (CC11-12RL1, CC11-12RL4, CC11-12W2, CC11-12SL1, CC11-12SL6) **Seminar and Essay:** Explicate "*Ode to Indolence*." Agree or disagree with Keats: 'This (Indolence) is the only happiness; and is a rare instance of advantage in the body overpowering the Mind.' Use textual evidence to support an original, concise thesis statement. (CC11-12RL1, CC11-12RL4, CC11-12W1, CC11-12SL1, CC11-12SL6) **Seminar and Essay:** What does *Robinson Caruso* reveal about the De Foe's point of view on imperialism? What does the author feel about colonization? What does De Foe feel about human nature? Is this a reflection of his times? Or is his point of view a departure from established beliefs of his day? Use textual evidence to support an original, concise thesis statement. (CC11-12RL1, CC11-12RL5, CC11-12W2, CC11-12SL1, CC11-12SL6)

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information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. **CC11-12L2 (a-b):** Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	recognize that this era, like all others, is filled with exceptions, contradictions, and subtleties.	Participate in a seminar discussion in which a philosophical question is explored in relation to a specific text.	**Seminar and Essay:** Compare and contrast the themes found in *Gulliver's Travels* and "*Micromegas.*" Do the texts share similar messages? Do they use satire in the same way? How does Swift's allegory compare to Voltaire's science fiction? Use evidence from both texts and organize in a comparative essay. Include an original, concise thesis statement. (CC11-12RL1, CC11-12RL3, CC11-12RL6, CC11-12W2, CC11-12SL1, CC11-12SL6) **Seminar and Essay:** Compare the science fiction elements in Voltaire's "*Micromégas*" and one of the tall tales in *The Surprising Adventures of Baron Munchhausen.* How does the science fiction genre enable the authors to express their ideas? Use textual evidence from both texts to support a concise, original thesis statement. (CC11-12RL3, CC11-12W2, CC11-12SL1, CC11-12SL6) **Seminar and Essay:** What point of view is revealed by Swift's allegory in *Gulliver's Travels*? How does his allegory satirize human behavior and human history? Are Swift's views reflective of the beliefs of his day? Use textual evidence to support an original thesis statement. (CC11-12RL1, CC11-12RL3, CC11-12RL6, CC11-12W2, CC11-12SL1, CC11-12SL6) **Seminar and Essay:** Read *The Vicar of Wakefield*. Is it a sentimental, idealistic novel? Or, is it a cynical satire? Use textual evidence to support an original, concise thesis statement. (CC11-12RL1, CC11-12RL3, CC11-12RL6, CC11-12W2, CC11-12SL1, CC11-12SL6) **Seminar and Essay:** Read the poems "*London, 1802*" and "*The Deserted Village*." What values and concerns do they both share? Cite specific evidence from both texts to support an original, concise thesis statement. (CC11-12RL1, CC11-12RL4, CC11-12W2, CC11-12SL1, CC11-12SL6) **Oral presentation:** Recite one of the poems of this unit from memory. Include an introduction that discusses how the poem relates to the natural world. (CC11-12SL6) **Writing:** Choose an existing essay from the current unit or one of the previous units and choose one of two ways of revising and expanding it: (a) taking a position on the topic and defending it with at least four secondary sources (including one that represents a contrasting point of view); (b) providing historical and cultural context, to be obtained and

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			synthesized from primary sources and at least four secondary sources. Write an annotated bibliography and an outline. This will ultimately become a ten-page research essay. (CC11-12W7) **Research Paper:** Using specific evidence from various sources studied in this unit, write a research paper that answers the essential question: What role does nature play in eighteenth and early nineteenth century literature? Include an original, concise thesis statement to answer this essential question. (CC11-12RL1, CC11-12RL2, CC11-12W7, CC11-12W8)
Unit Five: European Literature in the Nineteenth Century **Timeline: 5 weeks**			
CC1-12RL3: Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed). **CC11-12RL4:** Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.) **CC11-12RI2:** Determine two or more central ideas of a text and analyze their development over the course of the text, including how	They will explore both form and meaning of literary works and consider historical context. Through close reading of selected texts, students will see how subtle narrative and stylistic details contribute to the meaning of the whole. They will consider how certain poems of this unit are intimate on the one hand and reflective of a larger civilization on the other. Moral conflicts and subtle psychological portrayals of characters will be another area of focus; students will consider how novels of the nineteenth century develop character and how their conflicts are both universal	Consider the tension between art for art's sake and art as a response to social and cultural conflict, as expressed in the works of this unit. Closely analyze a key passage from a novel and comment on how it illuminates the work as whole. Contrast two works by a single author. Observe common tendencies, *cont*radictions, outliers, and subtleties of the Romantic and Victorian periods in literature. Contrast the moral conflicts of characters in two works of this unit consider how	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records Suggested Summative Assessments: **Seminar and Essay:** Compare the moral conflict of Julien Sorel in *The Red and the Black* and Nora Helmer in *A Doll's House*. What are their similarities and differences? Organize textual evidence to support an original, concise thesis statement. (CC11-12RI2, CC11-12RL3, CC11-12W1) **Seminar and Essay:** Analyze an author's view of art (and literature) as expressed in a work from this unit. Refer to Oscar Wilde's "Ballad of Reading Gaol" and *The Importance of Being Earnest* in order to gain

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they interact and build on one another to provide a complex analysis; provide an objective summary of the text. **CC11-12W5:** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. **CC11-12W7:** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. **CC11-12W18:** Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.	and culturally bound. Students will also have the opportunity to develop a research paper from earlier in the year and to write a shorter essay on topic from the unit. In their essays, students will continue to strive for precision and clarity, paying close attention to the nuances of words.	the poetry of this period reflects both on the human psyche and on the state of civilization. Analyze how the forms of the poems in this unit contribute to the meaning. Consider how the works of this period show signs of early modernism. Develop a research paper on one of the topics from this year. Indentify elements of romanticism and gothic romanticism in works of literature.	insight into the author's work as a whole. Organize textual evidence to support an original, concise thesis statement. (CC11-12RI2, CC11-12W1) **Seminar and Essay:** Closely analyze a key passage from a novel and comment on how setting illuminates the themes of the work as a whole. How do the aesthetics of setting create larger meaning? Consider Notre Dame in *The Hunchback of Notre Dame*, The Red Room in *Jane Eyre* or the Castle in *Dracula*. Organize textual evidence to support an original, concise thesis statement. (CC11-12RI2, CC11-12SL4, CC11-12W1) **Seminar and Essay:** According to Charles Darwin: "Of all the differences between man and the lower animal, man's sense of moral conscience is by far the most important." Do you agree with Darwin? Consider *Heart of Darkness*. Does this novel support or challenge Darwin's idea? Organize textual evidence to support an original, concise thesis statement. (CC11-12RI2, CC11-12SL4, CC11-12W1) **Seminar and Essay:** Some believe Victorians "invented" childhood through art and literature. Is childhood a product of nature and science or is it socially invented? What qualities of childhood are illustrated by the children's classics *Peter and Wendy* or *The Adventures of Alice in Wonderland?* What social conventions are these texts responding to? What literary devices are used to respond to the adult world of the Victorian era? Organize textual evidence to support an original, concise thesis statement. (CC11-12RI2, CC11-12SL4, CC11-12W1) **Seminar and Essay:** Consider *The Jungle Book* as an allegorical tale. What lessons do the laws of the jungle teach the reader? How does the text demonstrate romanticism through science? Organize textual evidence to support an original, concise thesis statement. (CC11-12RI2, CC11-12SL4, CC11-12W1) **Seminar and Essay:** How do the poems of this unit—especially Arnold, Baudelaire, Hopkins, Wilde, and Robert Browning--grapple with hope and despair? By the end of the poems selected, does hope or despair triumph? Organize textual evidence to support an original, concise thesis statement. (CC11-12RL2, CC11-12SL4, CC11-12W1) **Seminar/Essay:** Is it helpful or misleading to define literature in terms of trends and movements such as Romanticism? Organize textual

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CC11-12SL4: Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range or formal and informal tasks. **CC11-12L5 (a-b):** Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.			evidence to support an original, concise thesis statement. (CC11-12W1, CC11-12SL4) **Seminar/Essay:** Trace the distinction between logic and emotion in *Sense and Sensibility*. How does this text demonstrate itself as a romantic novel? Compare or contrast its depiction of class and gender hierarchies to another text in this unit. Organize textual evidence to support an original, concise thesis statement. (CC11-12RL2, CC11-12SL4, CC11-12W1) **Seminar and Essay:** Consider *The Three Musketeers* or *Twenty Thousand Leagues Under the Sea* as adventure novels. Do these texts serve the reader as a means of entertainment? Or are they meant to illustrate a social statement and moral message? Organize textual evidence to support an original, concise thesis statement. (CC11-12RI2, CC11-12W1) **Seminar and Essay:** Consider the horror novels: *Dracula* and/or *Frankenstein*. Are these texts written for the sake of entertaining us with horror and heighten our senses? Or, is social commentary weaved into the stories? Organize textual evidence to support an original, concise thesis statement. (CC11-12RI2, CC11-12W1) **Seminar and Essay:** Charlotte Bronte once said, "Conventionality is not morality." How is this statement illustrated in her novel *Jane Eyre?* Consider the text as a Gothic novel. How do it's Gothic characteristics help convey its themes? Organize textual evidence to support an original, concise thesis statement. (CC11-12RI2, CC11-12SL4, CC11-12W1) **Seminar and Essay:** Catherine in *Wuthering Heights* has to choose between nature and culture. Explain how this is illustrated in the text. Is this a moral choice? Organize textual evidence to support an original, concise thesis statement. (CC11-12RI2, CC11-12SL4, CC11-12W1) **Seminar and Essay:** Compare and contrast in a balanced argument *Wuthering Heights* and *Jane Eyre* with *Frankenstein* or *Dracula*. All are considered Gothic novels. What characteristics make them Gothic? Does the Gothic motif serve as a source of entertainment or does it help illustrate social commentary? Organize textual evidence to support an original, concise thesis statement. (CC11-12RI2, CC11-12SL4, CC11-12W1)

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
			Seminar and Essay: H.G. Wells called himself a Socialist. How does *The Time Machine* illustrate socialist values? Does this text maintain the tradition of the Victorian novel? How? Organize textual evidence to support an original, concise thesis statement. (CC11-12RI2, CC11-12SL4, CC11-12W1) **Seminar and Essay:** Ibsen's *A Doll's House* is considered by some to be the first feminist play. Do you agree or disagree with this designation? What do we mean when we call a piece of literature "feminist"? Do we make such a judgment according to today's standards or according to the standards in the day the text was written? You may refer to other texts to illustrate your point. Organize textual evidence to support an original, concise thesis statement. (CC11-12RI2, CC11-12SL4, CC11-12W1) **Speech:** Recite a poem from this unit (or a two-minute passage from a long poem). Include an introduction that discusses how the poem's structure and form contributes to its meaning. (CC11-12RI2, CC11-12SL4, CC11-12W1) **Research Paper:** Use specific evidence from various sources studied in this unit and/or additional sources to write a research paper that answers: How does the literature of the Romantic and Victorian era show tension between art for art's sake (where art includes literature) and art as a response to social and cultural conflict? Include an original, concise thesis statement to answer this essential question. (CC11-12RL1, CC11-12RI1, CC11-12W7, CC11-12W8)
SOCIAL STUDIES INTEGRATION: Historians in Conflict – Causes of the First World War **ELA CONCEPT: Research** **Timeline: 4 weeks**			
CC11-12RI7: Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem. **CC11-12W4:** Produce clear and	Effective researchers start with a clear purpose, topic, and audience when doing research. Effective researchers have a toolbox of strategies that help them organize, select,	What are effective research strategies and how do I apply those strategies to my own research? How do I compose an effective research paper and present my research for	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. **CC11-12W5:** Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. **CC11-12W6:** Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information. **CC11-12W7:** Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. **CC11-12W8:** Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and	and evaluate information. Effective research writers synthesize and interpret information in a documented research paper. Effective researchers present information without plagiarizing.	an audience? <u>Learning Targets:</u> • Select and research a topic • Evaluate sources • Take effective notes • Create source cards and paraphrase and summarize information, avoiding plagiarism • Compose a research paper, using proper formatting, and proper documentation of sources • Present research topic for an audience	• Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records <u>Summative Assessments:</u> **Social Studies Assessment:** Critique of the Armenian position that includes an examination of questions, sources, and biases. **English Language Arts Assessment:** Research paper on a student selected topic related to WWI or WWII.

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
overreliance on any one source and following a standard format for citation. **CC11-12W9:** Draw evidence from literary or informational texts to support analysis, reflection, and research. **CC11-12SL2:** Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. **CC11-12SL5:** Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. **CC11-12L1:** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. **CC11-12L2:** Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. **CC11-12L3:** Apply knowledge of language to understand how language functions in different			

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.			
Unit Six: European Literature in the Twentieth Century **Timeline: 5 weeks**			
CC11-12RL3: Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed). **CC11-12RL6:** Analyze a case in which grasping point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement). **CC11-12RL10:** By the end of grade 12, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 11–CCR text complexity band independently and proficiently. **CC11-12RI5:** Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging. **CC11-12W7:** Conduct short as well	It includes a few titles from the twenty-first century as well. The unit traces the flourishing of the American short story and the development of the novel and dramas since World War II. Students will read masters of the southern short story—writers like Eudora Welty and Flannery O'Connor. The unit also explores works by Richard Wright and Ralph Ellison, whose texts expose tensions within the emerging African American literary tradition. The 1960s are rich with both informational and literary works mirroring profound cultural shifts in the American landscape. This unit also emphasizes how the changing political landscape, including the words of leaders like John Fitzgerald Kennedy and	Read works of the twentieth century, focusing on the earlier decades. Consider aspects of modernism (such as anxiety) in their historical context. Explain both the breakdown and affirmation of form and meaning in modernist literature. Analyze dystopian literature, considering the problems inherent in fashioning a perfect person or society. Consider how poems in this unit reflect on poetry itself and its possibilities. Write research papers in which they consult literary criticism and historical materials. Consider the implications of modern versions of	Formative Assessments: • Reading response logs • Teacher observation of whole class, individual and collaborative work sessions • Whole class discussions • Daily quickwrites • Quizzes • Exit tickets • Daily journals • Study questions • Literature circle notes • Socratic seminar discussions • Individual check-ins with students • Using rubrics, checklists, feedback post-it, annotations, reflections, conference logs, anecdotal records Suggested Summative Assessments: **Seminar and Essay:** Discuss the characterization techniques authors use to create Huckleberry Finn, Jay Gatsby, and John Grady Cole. How are they the same? How are they different? Are some more effective than others? Why? Use at least three pieces of evidence to support your original thesis statement. (CC11-12RL3, CC11-12W2, CC11-12SL1, CC11-12L5) **Seminar and Essay:** Compare a scene from the 1951 film of *A Streetcar Named Desire* with the same scene in the 1995 film or a stage performance. Do you think the film or stage production is faithful to the author's intent? Why or why not? Cite at least three pieces of evidence to support an original thesis statement. (CC11-12RL7, CC11-12W2, CC11-12SL1) **Seminar and Essay:** "How do Willy Loman and Tommy Wilhelm

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. **CC11-12W8:** Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. **CC11-12SL1(a-d):** Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grades 11–12 topics, texts, and issues*, building on others' ideas and expressing their own clearly and persuasively. **CC11-12L6:** Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing,	Ronald Reagan, shaped the world in which we live.	classical works. Examine the musical allusions and their meanings in twentieth-century poetical works in seminars. Pursue focused questions in depth over the course of one or two class sessions. Understand absurdist and existential philosophy as it applies to literature and theatre. Research the literature they have read over the course of the year and the concepts they have studied.	contend with being 'nobody'?" Cite at least three pieces of evidence to support an original thesis statement. (CC11-12RL9, CC11-12W2, CC11-12SL1, CC11-12W9a) **Oral Presentation:** Play recordings of two of the poets reading their work. Make a presentation to the class about how their reading influences one's interpretation of the poem (e.g., tone, inflection, pitch, emphasis, pauses, etc.). (CC11-12RL4, CC11-12W6, CC11-12SL4, CC11-12SL5, CC11-12SL6) **Research Paper:** Write a research paper in which you trace the influence of World War II on American literature. Cite at least three pieces of textual evidence and three secondary sources to support your original thesis statement. (CC11-12RL1, CC11-12W7, CC11-12W8, CC11-12W9) **Oral Commentary:** Students will be given an unseen passage from a contemporary novel, poem, or short story and asked to provide a ten minute commentary on two of the following questions: • What are the effects of the dominant images uses in this extract? • Identify the poetic techniques used in this poem (or extract from a poem). Relate them to the content. • What do you think the important themes in this extract are? (CC11-12RL1, CC11-12RL4, CC11-12SL4)

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression			

Interactive Mathematics Program Curriculum Framework

School: The Delaware MET **Curricular Tool:** IMP **Grade or Course** Year 1 (grade 9)

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessments
Unit One: Patterns **Timeline: 13 days**			
Interpret expressions that represent a quantity in terms of its context. **CC.A-SSE.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.F-IF.1** Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. *For example, the Fibonacci sequence is defined recursively by f(0) = f(1) = 1, f(n+1) = f(n) + f(n-1) for n ≥ 1.* **CC.F-IF.3** Write a function that describes a relationship between two quantities. **CC.F-BF.1** Determine an explicit expression, a recursive process, or steps for calculation from a context. **CC.F-BF.1a** Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms. **CC.F-BF.2** 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.**CC.G-CO.1**	Patterns emphasizes extended, open-ended exploration and the search for patterns. Important mathematics introduced or reviewed in Patterns includes In-Out tables, functions, variables, positive and negative numbers, and basic geometry concepts related to polygons. Proof, another major theme, is developed as part of the larger theme of reasoning and explaining. Students' ability to create and understand proofs will develop over their four years in IMP; their work in this unit is an important start. This unit focuses on several mathematical ideas: • Finding, analyzing, and generalizing geometric and numeric patterns • Analyzing and creating In-Out tables • Using variables in a variety of ways, including to express generalizations • Developing and using general principles for working with variables, including the distributive property • Working with order-of-operations rules for arithmetic • Using a concrete model to understand and do arithmetic with positive and negative integers • Applying algebraic ideas, including In-Out tables, in geometric settings • Developing proofs concerning consecutive sums and other topics	Can students use variables and algebraic expressions to represent concrete situations, generalize results, and describe functions? Can students use different representations of functions—symbolic, graphical, situational, and numerical—and understanding the connections between these representations? Can students use function notation? Can students model, and computing with signed numbers? Can students solve equations using trial and error?	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessments
Unit Two: Game of Pig **Timeline: 17 days**			
Represent data with plots on the real number line (dot plots, histograms, and box plots). **CC.S-ID.1** Distinguish between correlation and causation. **CC.S-ID.9** Decide if a specified model is consistent with results from a given data-generating process, e.g. using simulation. *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?* **CC.S-IC.2** 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"). **CC.S-CP.1** Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent. **CC.S-CP.2** Understand the conditional probability of A given B as P(A and B)/P(B), and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B. **CC.S-CP.3** Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A and interpret the answer in terms of the model. **CC.S-CP.6** *Apply the Addition Rule, P(A or B) = P(A) + P(B) – P(A and B), and interpret the answer in terms of the model.* **CC.S-CP.7** *– supplementary lesson is being developed by the publisher* *Apply the general Multiplication Rule in a uniform probability model, P(A and B) = P(A)P(B|A) = P(B)P(A|B),*	As an introduction to the probability concepts and skills needed to analyze the game of Pig, students work on a variety of problems involving chance occurrences. Through these experiences, they develop an understanding of the concept of expected value and learn to calculate expected value using an area model. They also encounter some real-life "games," such as buying insurance and playing the lottery, and discover that in such situations, expected value may not be the sole criterion for making a decision. In the unit activities, students explore these important mathematical ideas: • Learning what constitutes a "complete strategy" for a game and developing and analyzing strategies • Calculating probabilities as fractions, decimals, and percents by emphasizing equally likely outcomes and by constructing mathematical models, including area models and tree diagrams • Determining whether events are independent • Using the idea of "in the long run" to develop the concept of expected value and calculating and interpreting expected values • Solving problems involving conditional probability • Making and interpreting frequency bar graphs • Using simulations to estimate probabilities and compare strategies • Comparing the theoretical analysis of a	Can students apply basic methods for calculating probabilities? Can students construct area models and tree diagrams? Can students distinguish between theoretical and experimental probabilities? Can students plan and carry out simulations? Can students collect and analyze data? Can students construct frequency bar graphs? Can students calculate, and interpret expected value? Can students apply the concept of expected value to real-world situations?	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessments
and interpret the answer in terms of the model. **CC.S-CP.8** - *unit supplement to be developed* 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. **CC.S-MD.1** Calculate the expected value of a random variable; interpret it as the mean of the probability distribution. **CC.S-MD.2** Develop a probability distribution for a random variable defined for a sample space in which theoretical probabilities can be calculated; find the expected value. *For example, find the theoretical probability distribution for the number of correct answers obtained by guessing on all five questions of multiple-choice test where each question has four choices, and find the expected grade under various grading schemes.* **CC.S-MD.3** Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values. **CC.S-MD.5** 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.* **CC.S-MD.5a** Evaluate and compare strategies on the basis of expected values. *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.* **CC.S-MD.5b** Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator). **CC.S-MD.6** Analyze decisions and strategies using probability concepts (e.g. product testing, medical testing, pulling a hockey goalie at the end of a game). **CC.S-MD.7**	situation with experimental results • Examining how the number of trials in a simulation affects the results		

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessments
Unit Three: The Overland Trail **Timeline: 18 days**			
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. **CC.N-Q.1** Define appropriate quantities for the purpose of descriptive modeling. **CC.N-Q.2** Interpret parts of an expression, such as terms, factors, and coefficients. **CC.A-SSE.1a** 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.A-SSE.2** Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. **CC.A-SSE.3** Create equations and inequalities in one variable and use them to solve problems. *Include equations arising from linear and quadratic functions, and simple rational and exponential functions.* **CC.A-CED.1** 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. **CC.A-REI.1** Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. **CC.A-REI.3** 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). **CC.A-**	Building on students' work in *Patterns*, this unit develops the central mathematical idea of functions and their representations. Students will move among the following four "faces" of functions: situations, graphs, tables and rules. The focus of this unit is on linear functions. Students will use starting values and rate of change to characterize linear functions, build In-Out tables, draw graphs, and write equations to represent specific contexts. They will use tables, graphs, and symbols to solve linear equations and systems of linear equations. They will fit lines to real data and use graphs and symbols representing these lines to solve problems in the context of the unit. The main concepts and skills that students will encounter and practice during the course of this unit can be summarized by category. **Constraints and Decision Making** • Creating examples that fit a set of constraints • Finding numbers that fit several conditions • Using tables of information and lines of best fit to make predictions and estimates • Working with mean and median **Algorithms, Variables, and Notation** • Strengthening understanding of the distributive property • Developing numeric algorithms for	Can students interpret graphs and use graphs to represent situations? Can students relate graphs to their equations, with emphasis on linear relationships? Can students solve pairs of linear equations by graphing? Can students fit equations to data, both with and without graphing calculators? Can students develop and use principles for equivalent expressions, including the distributive property? Can students use the distributive property? Can students apply principles for equivalent equations to solve equations? Can students solve linear equations in one variable? Do students understand relationships between the algebraic expression defining a linear function and the graph of that function?	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessments
REI.10 Explain why the *x*-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions. **CC.A-REI.11** Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context. **CC.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.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.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.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.F-IF.7**	problem situations • Expressing algorithms in words and symbols • Interpreting algebraic expressions in words using summary phrases • Developing meaningful algebraic expressions **Basics of Graphing** • Reviewing the coordinate system • Interpreting graphs intuitively and using graphs intuitively to represent situations • Making graphs from tabular information • Quantifying graphs with appropriate scales • Using graphs to represent two-variable equations and data sets • Using multiple representations—graphs, tables, and algebraic relationships—to describe situations **Linear Equations, Graphs, and Situations** • Finding and interpreting lines of best fit intuitively • Seeing the role of constant rate in linear situations • Using rates and starting values, or other data points, to create equations for straight lines • Laying the groundwork for the concept of slope • Using the point of intersection of two graphs to find values that satisfies two conditions • Solving linear equations for one variable in terms of another • Solving problems involving two linear conditions		

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessments
Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions. **CC.F-IF.7b** Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. **CC.F-LE.1a** Recognize situations in which one quantity changes at a constant rate per unit interval relative to another. **CC.F-LE.1b** Interpret the parameters in a linear or exponential function in terms of a context. **CC.F-LE.5** Represent data on two quantitative variables on a scatter plot and describe how the variables are related. **CC.S-ID.6** Use a model function fitted to the data to solve problems in the context of the data. *Use given model functions or choose a function suggested by the context. Emphasize linear and exponential models.* **CC.S-ID.6a** *Informally assess the fit of a model function by plotting and analyzing residuals.* **CC.S-ID.6b** – *unit supplement to be developed* Fit a linear function for scatter plots that suggest a linear association. **CC.S-ID.6c** Interpret the slope (rate of change) and the intercept (constant term) of a linear fit in the context of the data. **CC.S-ID.7** *Compute (using technology) and interpret the correlation coefficient of a linear fit.* ***CC.S-ID.8*** *– supplementary lesson is being developed by the publisher*	• Solving linear equations in one variable **Graphs and Technology** • Making and interpreting graphs on a graphing calculator • Using the zoom and trace features to get information from a graphing calculator		

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessments
Unit Four: The Pit and the Pendulum **Timeline: 18 day (90 minute blocks)**			
Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. **CC.N-Q.3** Interpret complicated expressions by viewing one or more of their parts as a single entity. *For example, interpret P(1+r)n as the product of P and a factor not depending on P.* **CC.A-SSE.1b** Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. **CC.F-IF.7** Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions. **CC.F-IF.7b** 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.F-BF.3** Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two inputoutput pairs (include reading these from a table). **CC.F-LE.2** 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. **CC.S-ID.2** Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). **CC.S-ID.3**	This unit draws on and extends students' work in the first three units. It blends scientific experiments with the statistical concepts of normal distribution and standard deviation and the algebra of functions and graphs. The main concepts and skills that students will encounter and practice during the course of this unit are summarized below. References to graphing calculators should be understood to include other technology that might be available. **Experiments and Data** • Planning and performing controlled scientific experiments • Working with the concept of period • Recognizing and accommodating for the phenomenon of measurement variation • Collecting and analyzing data • Expressing experimental results and other data using frequency bar graphs **Statistics** • Recognizing the normal distribution as a model for certain kinds of data • Making area estimates to understand the normal distribution • Developing concepts of data spread, especially standard deviation • Working with symmetry and concavity in connection with the normal distribution and standard deviation • Applying standard deviation and the normal distribution in problem contexts • Distinguishing between population standard deviation and sample • Calculating the mean and standard deviation of data sets, both by hand and	• Can students describe normal distributions and their properties? • Can students use mean and standard deviation? • Can students use normal distribution, mean, and standard deviation?	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessments
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. **CC.S-ID.4** Understand that statistics is a process for making inferences about population parameters based on a random sample from that population. **CC.S-IC.1** Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value. *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?* **CC.S-MD.4**	with calculators • Using standard deviation to decide whether a variation in experimental results is significant **Functions and Graphs** • Using function notation • Using graphing calculators to explore the graphs of various functions • Fitting a function to data using a graphing calculator • Making predictions based on curve-fitting		
Unit Five: Shadows **Timeline: 17 days**			
Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. *For example, rearrange Ohm's law V = IR to highlight resistance R.* **CC.A-CED.4** 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.**CC.G-CO.1** Use geometric descriptions of rigid motions to transform figures and to predict the effect of a rigid motion on a figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent. **CC.G-CO.6** Explain using rigid motions the meaning of congruence for triangles as the equality of all corresponding pairs of sides and all corresponding pairs of angles. **CC.G-CO.7**	The concept of similarity is the central theme of this unit. Through this concept, students explore the following important ideas from geometry and algebra. **Similarity and Congruence** • Developing intuitive ideas about the meaning of "same shape" and learning the formal definitions of similar and congruent • Discovering the special properties of triangles in connection with similarity, as well as other features of triangles as special polygons • Understanding the role of similarity in defining the trigonometric functions of sine, cosine and tangent **Proportional Reasoning and the Algebra of Proportions** • Understanding the meaning of	Do students understand the meaning of angles and angle measurement? Can students apply the relationships among angles of polygons, including angle-sum formulas? Can students apply criteria for similarity and congruence? Can students use properties of similar polygons to solve real-world problems? Can students use similarity to define right-triangle trigonometric functions? Can students apply right-	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessments
Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence. **CC.G-CO.8** Prove theorems about lines and angles. *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.* **CC.G-CO.9** Prove theorems about triangles. *Theorems include: 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.* **CC.G-CO.10** – *supplementary lessons are being developed by the publisher to cover theorems not already included in the curriculum.* Prove theorems about parallelograms. *Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other and conversely, rectangle are parallelograms with congruent diagonals.* **CC.G-CO.11** – *supplementary lessons are being developed by the publisher to cover theorems not already included in the curriculum.* Verify experimentally the properties of dilations: 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. **CC.G-SRT.1a** Verify experimentally the properties of dilations: The dilation of a line segment is longer or shorter in the ratio given by the scale factor. **CC.G-SRT.1b** Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar;	proportionality in connection with similarity • Developing equations of proportionality from situations involving similar figures • Understanding the role of proportionality in nongeometric situations • Developing techniques for solving equations involving fractional expressions **Polygons and Angles** • Developing angle sum formulas for triangles and other polygons • Discovering the properties of angles formed by a transversal across parallel lines • Discovering the triangle inequality and investigating its extension to polygons **Logical Reasoning and Proof** • Working with the concept of counterexample in understanding the criteria for similarity • Proving conjectures about vertical and polygon angle sums • Understanding the role of the parallel postulate in proofs **Right Triangles and Trigonometry** • Learning standard terminology for triangles, including hypotenuse, leg, opposite side, and adjacent side • Learning the right triangle definitions of *sine*, *cosine*, and *tangent* • Using sine, cosine, and tangent to solve real-world problems **Experiments and Data Analysis** • Planning and carrying out controlled experiments • Collecting and analyzing data	triangle trigonometry to real-world problems? Do students understand the meaning of angles and their measurement? Do students recognize relationships among angles of polygons, including angle-sum formulas? Can students define and apply properties of similarity and congruence? Can students use properties of similar polygons to solve real-world problems? Can students use similarity to define right-triangle trigonometric functions? Can students apply right-triangle trigonometry to real-world problems?	

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessments
explain using similarity transformations the meaning of similarity for triangles as the equality of all pairs of angles and the proportionality of all pairs of sides. **CC.G-SRT.2** Use the properties of similarity transformations to establish the AA criterion for similarity of triangles. **CC.G-SRT.3** Prove theorems about triangles using similarity transformations. *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.* **CC.G-SRT.4** Use triangle congruence and similarity criteria to solve problems and to prove relationships in geometric figures. **CC.G-SRT.5** 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.G-SRT.6** Explain and use the relationship between the sine and cosine of complementary angles. **CC.G-SRT.7** Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems. **CC.G-SRT.8** Find the point on a directed line segment between two given points that divide the segment in a given ratio. **CC.G-GPE.6**	• Identifying key features in graphs of data **Mathematical Modeling** • Using a geometric diagram to represent a real-world situation • Using scale drawings to solve problems • Applying properties of similar triangles to real-world situations • Exploring how models provide insight in a variety of situations		

Assessment Opportunities in this Unit:

End-of-Unit Assessments:
Each unit concludes with in-class and take-home assessments. The in-class assessment is intentionally short so that time pressures will not affect student performance. Students may use graphing calculators and their notes from previous work when they take the assessments.

On-Going Assessments:
Ongoing assessment includes the daily work of determining how well students understand key ideas and what level of achievement they have attained in acquiring key skills. Students' written and oral work provides many opportunities for teachers to gather this information.

- *Presentations on Calculator Exploration:* These presentations will give you information on how comfortable students are with calculators and open-ended investigation.

- *Pulling Out Rules:* This activity will help you gauge how well students understand the basic ideas of In-Out tables and evaluate their ability in writing rules to describe tables.
- *You're the Chef:* This summary activity will tell you how well students understand the arithmetic of positive and negative integers.
- *Presentations on Consecutive Sums:* These presentations will indicate how students are developing in their ability to conduct independent mathematical investigations.
- *An Angular Summary:* This activity will help you gauge students' understanding of the sum of the angles in a polygon and related formulas.
- *Border Varieties:* This activity will reflect students' understanding of the use of variables.
- *Pig Strategies:* This activity will help you gauge how well students understand the rules of Pig and assess their comfort level with the idea of strategy.
- *0 to 1, or Never to Always:* This activity will illustrate students' grasp of the 0-to-1 scale for probability.
- *Two-Dice Sums and Products:* This activity will show how well students understand and can work with two-dimensional area models.
- *Spinner Give and Take:* This activity can provide a baseline of students' initial understanding of the meaning of "the long run," in preparation for work with expected value.
- *Spins and Draws:* This activity will tell you how well students understand and can work with expected value.
- *A Fair Deal for the Carrier?:* This activity will inform you about students' ability to find probabilities in two-stage situations.
- *Little Pig Strategies:* This activity will tell you how well prepared students are for the detailed analysis of Little Pig.
- *The Best Little Pig:* This activity will inform you of students' grasp of the big picture in the analysis of Little Pig.
- *Creating Families:* This assignment will give you information on how well students can deal with verbal constraints.
- *Laced Travelers:* This activity will tell you whether students can put arithmetic processes into words.
- *Ox Expressions at Home:* This assignment will help you assess how well students understand meaningful algebraic expressions
- *Graph Sketches:* This activity will give you a sense of how well students understand graphs.
- *Who Will Make It?* This activity can help you gauge students' ability to make meaningful inferences from graphs.
- *All Four, One--Linear Functions:* This assignment will give you information about students' understanding of the connections among different ways to represent a situation.
- *Straight Line Reflections:* This activity will give you a sense of how well students understand concepts related to straight-line graphs.
- *More Fair Share for Hired Hands:* This assignment can provide information on student understanding of the connection between graphs and equations.
- *Family Comparisons by Algebra:* This activity will help you evaluate students' ability to represent situations using equations and their facility with solving linear equations.
- *Initial Experiments:* This activity will tell you how well students understand the idea of isolating a single variable.
- *Pulse Analysis:* This assignment will tell you about students' understanding of mean and frequency bar graphs.
- *Kai and Mai Spread Data:* This activity will give you a baseline of information about students' understanding of data spread.
- *Penny Weight Revisited:* This activity will guide you in determining students' intuitive understanding of standard deviation.
- *Pendulum Conclusions:* This assignment will tell you how well students can reason using the concept of standard deviation.
- *Graphing Summary:* This activity will give you information on what students know about the shape of graphs of various functions.
- *Mathematics and Science:* This assignment will give you insight into what students see as the key ideas of the unit.
- *Shadow Data Gathering* and *Working with Shadow Data:* These activities, which ask students to set up and conduct controlled experiments (as in the unit *The Pit and the Pendulum*), will provide evidence of their understanding of the unit problems.
- *Similar Problems:* This assignment will provide evidence of students' ability to write and solve proportions derived from similar figures.
- *Angles and Counterexamples:* This activity will help you assess students' ability to create and solve linear equations derived from a geometric context and their developing understanding of similarity.
- *Angles, Angles, Angles:* This assignment will give you information on students' knowledge of facts about angles created by intersecting lines (including

transversals of parallel lines) and interior angles of polygons.

- *Mirror Madness:* This activity will tell you whether students can use the reflective property of mirrors along with the concept of similarity to do indirect measurement.
- *A Shadow of a Doubt:* This activity will provide evidence about whether students understand the general solution to the lamp shadow problem.
- *The Tree and the Pendulum:* This assignment will illustrate students' ability to use trigonometry to do indirect measurement.
- *A Bright, Sunny Day:* This activity will provide evidence of students' understanding of the general solution to the sun shadow problem.

NOTE: When developed in Phase II, individual units will better define the assessment tools and demonstrate how they will be used formatively and summative.

Interactive Mathematics Program Curriculum Framework

School: The Delaware MET **Curricular Tool:** IMP **Grade or Course:** Year 2 (grade 10)

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
Unit One: Do Bees Build it Best? **Timeline: 20 days**			
Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. **CC.N-Q.3** Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise. **CC.A-REI.2** Solve quadratic equations by inspection (e.g., for $x^2 = 49$), 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 $a \pm bi$ for real numbers a and b. **CC.A-REI.4b** 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.F-IF.5** Prove theorems about triangles using similarity transformations. *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.* **CC.G-SRT.4** Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems. **CC.G-SRT.8** Prove the Laws of Sines and Cosines and use them to solve problems. **CC.G-SRT.10**	The regular form of a honeycomb is striking. Viewed end on, honeycomb cells resemble the hexagonal tiles on a bathroom floor. But a honeycomb is a three-dimensional object, a collection of right hexagonal prisms. Why do bees build their honeycombs this way? Concepts of measurement—especially area, surface area, and volume—are the mathematical focus of this unit. The main concepts and skills that students will encounter and practice during the unit are summarized by category here. ***Area*** • Understanding the role of units in measuring area • Establishing standard units for area, especially those based on units of length • Recognizing that a figure's perimeter alone does not determine its area • Discovering formulas for the areas of rectangles, triangles, parallelograms, and trapezoids • Establishing that a square has the greatest area of all rectangles with a fixed perimeter • Developing a formula for the area of a regular polygon with a given perimeter in terms of the number of sides • Discovering that for a fixed perimeter, the more sides a regular polygon has, the greater its area • Discovering that the ratio of the areas of similar figures is equal to the square of the ratio of their corresponding linear dimensions	Can students measure area using both standard and nonstandard units? Can students use several methods for finding areas of polygons, including development of formulas for area of triangles, rectangles, parallelograms, trapezoids, and regular polygons? Can students find surface area and volume for three-dimensional solids, including prisms and cylinders? Can students apply the Pythagorean theorem? Can students prove the Pythagorean theorem? Can students maximize area for a given perimeter? Do students understand the relationship between the areas and volumes of similar figures? Can students create successful tessellations? Can students apply right triangle trigonometry to area and perimeter problems?	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
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). **CC.G-SRT.11** Give an informal argument for the formulas for the volume of a cylinder, pyramid, and cone. *Use dissection arguments, Cavalieri's principle, and informal limit arguments.* **CC.G-GMD.1** *Given an informal argument using Cavalieri's principle for the formulas for the volume of a sphere and other solid figures.* **CC.G-GMD.2** – *unit supplement to be developed* Use volume formulas for cylinders, pyramids, cones and spheres to solve problems. **CC.G-GMD.3** Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects. **CC.G-GMD.4** Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy constraints or minimize cost; working with typographic grid systems based on ratios). **CC.G-MG.3**	***The Pythagorean Theorem*** • Discovering the Pythagorean theorem by comparing the areas of the squares constructed on the sides of a right triangle • Proving the Pythagorean theorem using an area argument • Applying the Pythagorean theorem in a variety of situations ***Surface Area and Volume*** • Understanding the role of units in measuring surface area and volume • Establishing standard units for surface area and volume, especially those based on a unit of length • Recognizing that a solid figure's surface area alone does not determine its volume • Developing principles relating the volume and surface area of a prism to the area and perimeter of its base • Discovering that the ratio of the surface areas of similar solids is equal to the square of the ratio of their corresponding linear dimensions, and that the ratio of the volumes of similar solids is equal to the cube of the ratio of their corresponding linear dimensions ***Trigonometry*** • Reviewing right-triangle trigonometry • Finding the ranges of the basic trigonometric functions (for acute angles) • Using the terminology and notation of inverse trigonometric functions ***Miscellaneous*** • Reviewing similarity • Reviewing the triangle inequality • Reviewing the angle sum property for triangles • Strengthening two- and three-dimensional spatial visualization skills • Examining the concept of tessellation and		

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
	discovering which regular polygons tessellate • Developing some properties of square-root radicals • Developing the general concept of an inverse function		
Unit Two: Cookies **Timeline: 18 days**			
Create equations and inequalities in one variable and use them to solve problems. *Include equations arising from linear and quadratic functions, and simple rational and exponential functions.* **CC.A-CED.1** Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. **CC.A-CED.2** Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. *For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.* **CC.A-CED.3** Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. **CC.A-REI.3** *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.* ***CC.A-REI.5*** *– supplementary lesson is being developed by the publisher* Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. **CC.A-REI.6**	The central mathematical focus of *Cookies* is the formulation and solution of problems of optimization, or linear programming problems. In problems of this type, a linear function is to be optimized and a set of linear conditions constrains the possible solutions. Linearity is an important feature of these two-variable problems, in two ways: • The constraints are linear, so the feasible region is a polygon and its vertices can be found by solving pairs of linear equations. • The expression to be maximized or minimized is linear, so the points that give this expression a particular value lie on a straight line, and investigating a series of values produces a family of parallel lines. The linear programming problems that students encounter in this unit involve only two variables and a limited number of constraints. Their solutions are therefore easier to understand graphically, and the algebra needed to find their exact solutions is manageable. The main concepts and skills that students will encounter and practice during the unit are summarized here. ***Using Variables to Represent Problems*** • Expressing and interpreting constraints using inequalities • Expressing problem situations using systems of linear equations ***Working with Variables, Equations, and***	Can students express real-world situations in terms of equations and inequalities? Can students apply the distributive property? Can students use several methods for solving systems of linear equations in two variables? Can students define and recognize dependent, inconsistent, and independent pairs of linear equations? Can students solve non-routine equations using graphing calculators? Can students write and graph linear inequalities in two variables? Can students use principles of linear programming for two variables? Can students create linear programming problems with two variables?	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
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 $y = -3x$ and the circle $x^2 + y^2 = 3$. **CC.A-REI.7** 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 halfplanes. **CC.A-REI.12** 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.F-IF.4** Graph linear and quadratic functions and show intercepts, maxima, and minima. **CC.F-IF.7a**	***Inequalities*** • Finding equivalent expressions and inequalities • Solving linear equations for one variable in terms of another • Developing and using a method for solving systems of two linear equations in two unknowns • Recognizing inconsistent systems and dependent systems ***Graphing*** • Graphing linear inequalities and systems of linear inequalities • Finding the equation of a straight line and the inequality for half plane • Using graphing calculators to draw feasible regions • Relating the intersection point of graphed lines to the common solution of the related equations • Using graphing calculators to estimate coordinates of points of intersection ***Reasoning Based on Graphs*** • Recognizing that setting a linear expression equal to a series of constants produces a family of parallel lines • Finding the maximum or minimum of a linear equation over a region • Examining how the parameters in a problem affect the solution • Developing methods of solving linear programming problems with two variables ***Creating Word Problems*** • Creating problems that can be solved using two equations in two unknowns • Creating problems that can be solved by linear programming methods		

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
Unit Three: Is There Really a Difference? **Timeline: 21 days**			
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. **CC.S-ID.5** Distinguish between correlation and causation. **CC.S-ID.9** Understand that statistics is a process for making inferences about population parameters based on a random sample from that population. **CC.S-IC.1** Decide if a specified model is consistent with results from a given data-generating process, e.g. using simulation. *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?* **CC.S-IC.2** Recognize the purposes of and differences among sample surveys, experiments and observational studies; explain how randomization relates to each. **CC.S-IC.3** 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. **CC.S-IC.4** Use data from a randomized experiment to compare two treatments; justify significant differences between parameters through the use of simulation models for random assignment. **CC.S-IC.5** Evaluate reports based on data. **CC.S-IC.6** Construct and interpret two-way frequency tables of data when two categories are associated with each	The unit explores two categories of problems: • Problems that compare a single population to a theoretical model (the theoretical-model case) • Problems that compare two distinct populations (the two-population case) Students learn that statisticians often presume that a "neutral" hypothesis, called a null hypothesis, holds unless there is clear evidence to the contrary. In the context of the two categories of problems, the null hypothesis is that the single population *does* fit the model or that the two populations being studied *are* the same. Students learn that to evaluate the null hypothesis, they must examine whether the observed data could reasonably have occurred under that null hypothesis. In the course of studying such questions, students will • work with double-bar graphs to explore data • form hypotheses and corresponding null hypotheses • develop an intuitive sense for evaluating differences between sets of data • learn ways of organizing and presenting data • learn about designing and carrying out statistical studies This unit builds on students' prior experience with statistical ideas in the Year 1 unit *The Pit and the Pendulum.* In that unit, students worked with the normal distribution and used the standard deviation statistic as their primary tool. In this unit, students use the chi-square statistic, or x^2 statistic. In the main activities of the unit, students use the x^2 statistic only in the case of one degree of freedom. Supplemental activities explore more general use of the statistic.	Can students draw inferences from statistical data? Can students design, conduct, and interpret statistical experiments? Can students make and test statistical hypotheses? Can students formulate null hypotheses and understand its role in statistical reasoning? Can students use the χ^2 statistic? Do students understand that tests of statistical significance do not lead to definitive conclusions? Can students solve problems that involve conditional probability?	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. *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 class will favor science given that the student is a boy. Do the same for other subjects and compare the results.* **CC.S-CP.4** Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. *For example, compare the chance of being unemployed if you are female with the chance of being female if you are unemployed.* **CC.S-CP.5** Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value. *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?* **CC.S-MD.4**	Although the unit makes intensive use of the x^2 statistic, the real emphasis is on broader statistical ideas, such as the null hypothesis, sampling fluctuation, and hypothesis testing. The main concepts and skills that students will encounter and practice during the course of this unit are summarized by category here. ***Setting Up Statistical Investigations*** • Distinguishing between data snooping and hypothesis testing • Describing the characteristics of a good sample • Making null hypotheses • Using proportional reasoning to analyze the consequences of a null hypothesis • Designing and conducting statistical experiments ***Interpreting Data*** • Making hypotheses about larger populations by analyzing sample data • Constructing and drawing inferences from charts, tables, and graphs, including frequency bar graphs and double-bar graphs • Determining whether to accept or reject a null hypothesis • Understanding the consequences of rejecting a null hypothesis • Interpreting statistical experiments and communicating the outcomes ***The x^2 Statistic*** • Developing intuition about the meaning of the x^2 statistic • Using simulations to estimate the x^2 distribution • Interpreting the x^2 distribution curve as a probability table • Calculating and interpreting the x^2 statistic in order to compare data from real-world situations to theoretical models		

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
	• Calculating and interpreting the x^2 statistic in order to compare two populations • Using the x^2 statistic to make decisions • Understanding some limitations in applying the x^2 statistic ***Related Concepts*** • Working with conditional probabilities • Using simulations to develop intuition and to obtain data about sampling fluctuation • Developing intuition about when differences in samples indicate that the larger populations are likely to be different • Understanding why neither numeric difference nor percentage difference is an adequate tool for measuring the "weirdness" of data • Reviewing the normal distribution and standard deviation and their applications to decision making		
Unit Four: Fireworks **Timeline: 13 days**			
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.A-SSE.2** Factor a quadratic expression to reveal the zeros of the function it defines. **CC.A-SSE.3a** Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines. **CC.A-SSE.3b** 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.A-APR.1** *Know and apply the Remainder Theorem: For a*	*Fireworks* focuses on the use of quadratic functions to represent a variety of real-world situations and on the development of algebraic skills for working with those functions. Experiences with graphs play an important role in understanding the behavior of quadratic functions. The main concepts and skills students will encounter and practice during the unit are summarized here. ***Mathematical Modeling*** • Expressing real-world situations in terms of functions and equations • Applying mathematical tools to models of real-world problems • Interpreting mathematical results in terms of real-world situations	Can students solve quadratic equations by factoring? Can students relate the number of roots of a quadratic equation to the graph of the associated quadratic function? Can students use the method of completing the square to analyze the graphs of quadratic equations and to solve quadratic equations?	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
polynomial p(x) and a number a, the remainder on division by x – a is p(a), so p(a) = 0 if and only if (x – a) is a factor of p(x). **CC.A-APR.2** *- unit supplement to be developed* 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. **CC.A-APR.3** Solve quadratic equations in one variable. **CC.A-REI.4** Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x – p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form. **CC.A-REI.4a** Solve quadratic equations by inspection (e.g., for $x^2 = 49$), 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 $a \pm bi$ for real numbers a and b. **CC.A-REI.4b** Graph linear and quadratic functions and show intercepts, maxima, and minima. **CC.F-IF.7a** Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior. **CC.F-IF.7c** Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. **CC.F-IF.8** 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.F-IF.8a**	***Graphs of Quadratic Functions*** • Understanding the roles of the vertex and x-intercept in the graphs of quadratic functions • Recognizing the significance of the sign of the x^2 term in determining the orientation of the graph of a quadratic function • Using graphs to understand and solve problems involving quadratic functions ***Working with Algebraic Expressions*** • Using an area model to understand multiplication of binomials, factoring of quadratic expressions, and completing the square of quadratic expressions • Transforming quadratic expressions into vertex form • Simplifying expressions involving parentheses • Identifying certain quadratic expressions as perfect squares ***Solving Quadratic Equations*** • Interpreting quadratic equations in terms of graphs and vice versa • Estimating x-intercepts using a graph • Finding roots of an equation using the vertex form of the corresponding function • Using the zero product rule of multiplication to solve equations by factoring		

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
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.F-IF.9** 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.F-BF.3**			
Unit Five: All About Alice **Timeline: 12 days**			
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. *For example, we define $5^{1/3}$ to be the cube root of 5 because we want $(5^{1/3})^3 = 5^{(1/3)3}$ to hold, so $(5^{1/3})^3$ must equal 5.* **CC.N-RN.1** Rewrite expressions involving radicals and rational exponents using the properties of exponents. **CC.N-RN.2** *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.* ***CC.N-RN.3*** *– supplementary lesson is being developed by the publisher* 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. *For example, calculate*	Unlike most other IMP units, All About Alice has no central problem to solve. Instead, there is a general context to the unit. In particular, the Alice story provides a metaphor for understanding exponents. When Alice eats an ounce of cake, her height is multiplied by a particular whole-number amount; when she drinks an ounce of beverage, her height is multiplied by a particular fractional amount. Using this metaphor, students reason about exponential growth and decay. Students use several approaches to extend exponentiation beyond positive integers: a contextual situation, algebraic laws, graphs, and number patterns. They then apply principles of exponents to study logarithms and scientific notation. The main concepts and skills students will encounter and practice during the course of this unit are summarized by category here.	Can students use exponential expressions, including zero, negative, and fractional exponents? Can students apply the laws of exponents? Can students use scientific notation? Can students use the concept of order of magnitude in estimation?	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
mortgage payments. **CC.A-SSE.4** Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude. **CC.F-IF.7e** Use the properties of exponents to interpret expressions for exponential functions. *For example, identify percent rate of change in functions such as* $y = (1.02)^t$, $y = (0.97)^t$, $y = (1.01)^{12t}$, $y = (1.2)^{t/10}$, *and classify them as representing exponential growth or decay.* **CC.F-IF.8b** Find inverse functions. **CC.F-BF.4** 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,* $f(x) = 2x^3$ *for* $x > 0$ *or* $f(x) = (x+1)/(x-1)$ *for* $x \neq 1$. **CC.F-BF.4a** Verify by composition that one function is the inverse of another. **CC.F-BF.4b** Read values of an inverse function from a graph or a table, given that the function has an inverse. **CC.F-BF.4c** Understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents. **CC.F-BF.5** Distinguish between situations that can be modeled with linear functions and with exponential functions. **CC.F-LE.1** Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. **CC.F-LE.1a**	***Extending the Operation of Exponentiation*** • Defining the operation for an exponent of zero • Defining the operation for negative integer exponents • Defining the operation for fractional exponents ***Laws of Exponents*** • Developing the additive law of exponents • Developing the law of repeated exponentiation ***Graphing*** • Describing the graphs of exponential functions • Comparing graphs of exponential functions for different bases • Describing the graphs of logarithmic functions • Comparing graphs of logarithmic functions for different bases ***Logarithms*** • Understanding the meaning of logarithms • Making connections between exponential and logarithmic equations ***Scientific Notation*** • Converting numbers from ordinary notation to scientific notation, and vice versa • Developing principles for doing computations using scientific notation • Using the concept of order of magnitude in estimation		

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another. **CC.F-LE.1c** Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function. **CC.F-LE.3**			

Assessment Opportunities in this Unit:

End-of-Unit Assessments:
Each unit concludes with in-class and take-home assessments. The in-class assessment is intentionally short so that time pressures will not affect student performance. Students may use graphing calculators and their notes from previous work when they take the assessments.

Ongoing Assessment:
Assessment is a component in providing the best possible ongoing instructional program for students. Ongoing assessment includes the daily work of determining how well students understand key ideas and what level of achievement they have attained in acquiring key skills.

Students' written and oral work provides many opportunities for teachers to gather this information. Here are some recommendations of written assignments and oral presentations to monitor especially carefully that will offer insight into student progress.

- How Many Can You Find?: This assignment will inform you about how well students have understood the basics about the meaning of area.
- That's All There Is!: This activity will tell you how comfortable students are with a more open-ended approach to area.
- More Gallery Measurements: This activity will provide information on students' grasp of the fundamentals of right-triangle trigonometry.
- Any Two Sides Work, Make the Lines Count, and The Power of Pythagoras: These assignments will tell you about students' comfort with using the Pythagorean theorem.
- Leslie's Fertile Flowers: In this activity, students need to combine ideas about area with use of the Pythagorean theorem, so it will give you a sense of their facility with these concepts.
- More Fencing, Bigger Corrals: This activity, which involves how changes in linear dimensions affect area, will help you decide how much work students need on this topic.
- Not a Sound: This assignment will give you feedback on students' grasp of the concept of surface area.
- Inequality Stories, Part I: This assignment will give you information about students' understanding of how real-life contexts can be expressed in algebraic terms using inequalities.
- Profitable Pictures: This activity will tell you how well students understand how profit lines can be used to determine an optimal value.
- Changing What You Eat: In this assignment, students will demonstrate their understanding of how changing specific parameters in a problem affects the solution.
- Get the Point: This investigation will give you insight into students' abilities to think about systems of linear equations in flexible ways.
- A Reflection on Money: This assignment will give you information about students' comfort levels with solving systems of linear equations.
- "How Many of Each Kind?" Revisited: This activity will tell you how well students have synthesized the ideas of the unit.

- Changing the Difference, Part I: This work will give you information on students' sense of how probabilities behave with large samples.
- Loaded or Not?: This activity will tell you how well students can interpret experimental data.
- Decisions with Deviation: This assignment will provide information about students' understanding of how to use the normal distribution.
- Measuring Weirdness with χ^2: This activity will give you information about students' understanding of how to calculate and use the χ^2 statistic.
- Late in the Day: This assignment will give you feedback on how well students can set up and analyze a situation using the χ^2 statistic.
- "Two Different Differences" Revisited: This activity will give you information on students' abilities to do a complete analysis of a situation using the χ^2 statistic.
- Using Vertex Form will illustrate students' ability to pull together and use the various components of the vertex form of a quadratic.
- Squares and Expansions will demonstrate students' developing understanding of the technique of completing the square.
- How Much Can They Drink? will provide information on students' developing understanding of how to find the maximum value of a quadratic function to find the solution to a problem in context.
- Another Rocket will show how well students are prepared to address the unit problem.
- A Fireworks Summary is a reflective piece in which students summarize their work on the unit problem.
- A Quadratic Summary is a reflective piece in which students summarize their understanding of the big ideas of the unit.
- Graphing Alice: This assignment will give you information about how well students understand the basic Alice metaphor and about their comfort with nonlinear graphs.
- Having Your Cake and Drinking Too: This activity will reveal students' ability to work with the Alice metaphor in a complex situation.
- Negative Reflections: This assignment will tell you how well students understand the extension of exponentiation to negative exponents.
- All Roads Lead to Rome: This activity will give you information on students' ability to synthesize a variety of approaches to understanding a mathematical concept.
- Alice on a Log: This assignment will give you information on students' understanding of the basics about logarithms.

NOTE: When developed in Phase II, individual units will better define the assessment tools and demonstrate how they will be used formatively and summative.

Interactive Mathematics Program Curriculum Framework

School: The Delaware Met **Curricular Tool: IMP** **Grade or Course: Year 3 (grade 11)**

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
Unit One: Orchard Hideout **Timeline: 17 days**			
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.**CC.G-CO.1** Prove theorems about lines and angles. *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.* **CC.G-CO.9** Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc). *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.* **CC.G-CO.12** *Construct an equilateral triangle, a square and a regular hexagon inscribed in a circle.* ***CC.G-CO.13*** *– supplementary lesson is being developed by the publisher* *Derive the formula A = ab sin(C) for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side.* ***CC.G-SRT.9*** *– supplementary lesson is being developed by the publisher* *Prove that all circles are similar.* ***CC.G-C.1*** *– supplementary lesson is being developed by the publisher*	The central unit problem concerns a couple who have planted an orchard of trees in careful rows and columns on a circular lot. The couple realizes that, after a while, the trunks of their trees will become so thick that they will no longer be able to see out from the center of the orchard. In other words, the orchard will become a "hideout." The main unit question is this: **How soon after the couple plant the orchard will the center of the lot become a true "orchard hideout"?** Students' search for the answer to this question leads them to the study of several aspects of geometry. Students use the Pythagorean Theorem to measure distances within the orchard, leading to development of the distance formula. As a sidelight to their work with the distance formula, students construct the general equation of a circle. Giving the initial size of the trees in terms of circumference and the growth rate in terms of cross-sectional area motivates development of the area and circumference formulas for a circle. While solving the unit problem, students encounter a variety of tangents (both	Can students explain the relationship of the area and circumference of a circle to its radius? Do students understand the significance of using regular polygons to approximate the area and circumference of a circle? Can students justify locus descriptions of various geometric entities, such as perpendicular bisectors and angle bisectors? Can students apply properties of parallel lines? Can students identify possible intersections of lines and planes? Can students use "if and only if" in describing sets of points fitting given criteria? Can students define and use the concept of the converse of a statement?	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
Identify and describe relationships among inscribed angles, radii, and chords. *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.* **CC.G-C.2** Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle. **CC.G-C.3** *Construct a tangent line from a point outside a given circle to the circle.* ***CC.G-C.4*** *- supplementary lesson is being developed by the publisher* 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. **CC.G-GPE.1** Derive the equation of a parabola given a focus and directrix. **CC.G-GPE.2** Derive the equations of ellipses and hyperbolas given two foci for the ellipse, and two directrices of a hyperbola. **CC.G-GPE.3** Use coordinates to prove simple geometric theorems algebraically. *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 (1, √3) lies on the circle centered at the origin and containing the point (0, 2).* **CC.G-GPE.4** *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).* ***CC.G-GPE.5*** *– supplementary lesson is being developed by the publisher*	figuratively and literally). One result is a proof that a tangent to a circle is perpendicular to the radius at the point of tangency. They use the technique of completing the square to put certain quadratic equations into standard form to find the radius and center of the circles they represent. Other ideas arise through the unit's POWs. For example, students prove basic facts about perpendicular bisectors and angle bisectors, thereby establishing the existence of both circumscribed and inscribed circles for triangles. The main concepts and skills students will encounter and practice during the unit are summarized below. ***Coordinate geometry*** • Using the Cartesian coordinate system to organize a complex problem • Developing and applying the distance formula • Developing the standard form for the equation of a circle with a given center and radius • Finding the distance from a point to a line in a coordinate setting • Developing and applying the midpoint formula ***Circles*** • Using similarity to see that the circumference of a circle should be a constant times its radius, and that the area of a circle should be a constant times the square of its radius • Finding formulas for the perimeter and area of regular polygons circumscribed about a circle		

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
Use coordinates to compute perimeters of polygons and areas for triangles and rectangles, e.g. using the distance formula. **CC.G-GPE.7** Use volume formulas for cylinders, pyramids, cones and spheres to solve problems. **CC.G-GMD.3** Use geometric shapes, their measures and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder). **CC.G-MG.1**	• Using circumscribed polygons to see that the "circumference coefficient" for the circle is twice the "area coefficient" for the circle • Defining π and understanding why it appears in the formulas for both the circumference and the area of a circle • Developing and applying formulas for the circumference and area of a circle ***Synthetic Geometry*** • Identifying and describing a set of points satisfying a geometric condition • Discovering and proving that the set of points equidistant from two given points is the perpendicular bisector of the segment connecting the given points • Defining the distance from a point to a line and proving that the perpendicular distance is the shortest • Discovering and proving that any line through the midpoint of a segment is equidistant from the endpoints of the segment • Discovering and proving that the set of points equidistant from two intersecting lines consists of the bisectors of the angles formed by the lines ***Algebra*** • Using the technique of completing the square to transform equations of circles into standard form • Using algebra in a variety of proofs involving coordinates and angles ***Logic*** • Understanding and using the phrases "if-then" and "if and only if" in		

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
	definitions and proofs • Working with converses ***Miscellaneous*** • Using symmetry to help analyze a problem • Learning about Pythagorean triples		
Unit Two: Meadows or Malls? **Timeline: 27 days**			
Use matrices to represent and manipulate data, e.g., to represent payoffs or incidence relationships in a network. **CC.N-VM.6** Multiply matrices by scalars to produce new matrices, e.g., as when all of the payoffs in a game are doubled. **CC.N-VM.7** Add, subtract, and multiply matrices of appropriate dimensions. **CC.N-VM.8** Understand that, unlike multiplication of numbers, matrix multiplication for square matrices is not a commutative operation, but still satisfies the associative and distributive properties. **CC.N-VM.9** 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. **CC.N-VM.10** *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.* ***CC.N-VM.11*** *– supplementary unit being is developed by the publisher* *Work with 2 × 2 matrices as transformations of the plane, and interpret the absolute value of the determinant in terms of area.* ***CC.N-VM.12*** *- supplementary unit is being developed by the publisher*	The main concepts and skills that students will encounter and practice during this unit are: ***General Linear Programming*** • Seeing that for two-variable problems, the optimal value always occurs at a corner point of the feasible region • Generalizing the corner-point principle to more than two variables • Recognizing that for two-variable problems, corner points can be found as the intersections of lines corresponding to constraint equations or inequalities • Generalizing the method of finding corner points to more than two variables ***Solving Linear Equations*** • Using substitution, graphing, and guess-and-check methods to solve systems of linear equations in two variables • Developing and using the elimination method to solve systems of linear equations in two or more variables • Using the concepts of **inconsistent**, **dependent,** and **independent** systems of equations ***Geometry in the Plane and in 3-Space***	Can students use the elimination method for solving systems of linear equations in up to four variables? Can students extend the concepts of dependent, inconsistent, and independent systems of linear equations to more than two variables? Can students use matrices? Can students use the operations of matrix addition and multiplication in the context of applied problems? Can students use of matrices to represent systems of linear equations? Can students use the identity element and inverse in the context of matrices? Can students use matrices and matrix inverses to solve systems of linear equations? Can students relate the existence of matrix inverses to the uniqueness of the solution of corresponding systems of	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. *For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.* **CC.A-CED.3** Represent a system of linear equations as a single matrix equation in a vector variable. **CC.A-REI.8** Find the inverse of a matrix if it exists and use it to solve systems of linear equations (using technology for matrices of dimension 3 × 3 or greater). **CC.A-REI.9**	• Extending the concept of coordinates to three variables by introducing a third axis perpendicular to the first two • Graphing linear equations in three variables and recognizing that these graphs are planes in 3-space • Seeing that two distinct points always determine a unique line and that two distinct lines in the plane determine a unique point unless the lines are parallel • Examining the possible intersections of planes in 3-space • Relating the possible intersections of lines and planes to the algebra of solving linear systems in two or three variables ***Matrix Algebra*** • Using matrices to represent information • Using problem situations to motivate and develop the definitions of matrix addition and multiplication • Examining whether matrix operations have certain properties, such as associativity and commutativity ***Matrices and Systems of Linear Equations*** • Seeing that systems of linear equations are equivalent to certain types of matrix equations • Recognizing the role of identity and inverse elements in solving certain types of matrix equations • Finding matrix inverses by hand by solving systems of linear equations • Understanding the relationship between a system of linear equations	linear equations? Can students use calculators to multiply and invert matrices and to solve systems of linear equations? Can students apply the concepts of linear programming to problems with several variables? Can students use equations of planes in three-dimensional coordinate geometry? Can students define polar coordinates? Do students recognize graphs of polar equations?	

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
	having a unique solution and the coefficient matrix being invertible ***Technology*** • Entering matrices and doing matrix operations on a graphing calculator • Using matrix inversion on a graphing calculator to solve systems of linear equations		
Unit Three: Small World, Isn't It? **Timeline: 15 days**			
Use the properties of exponents to transform expressions for exponential functions. *For example the expression 1.15t can be rewritten as* $(1.15^{1/12})^{12t} \approx 1.012^{12t}$ *to reveal the approximate equivalent monthly interest rate if the annual rate is 15%.* **CC.A-SSE.3c** 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. *For example, calculate mortgage payments.* **CC.A-SSE.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.F-IF.5** Use the properties of exponents to interpret expressions for exponential functions. *For example, identify percent rate of change in functions such as* $y = (1.02)^t$, $y = (0.97)^t$, $y = (1.01)^{12t}$, $y = (1.2)^{t/10}$, *and classify them as representing exponential growth or decay.* **CC.F-IF.8b** Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms. **CC.F-BF.2** Recognize situations in which a quantity grows or decays by a	The main concepts and skills that students will encounter and practice during this unit are: ***Rate of Change*** • Evaluating average rate of change in terms of the coordinates of points on a graph • Understanding the relationship between the rate of change of a function and the appearance of its graph • Realizing that in many contexts, the rate of growth or decline with respect to time in a population is proportional to the population ***Slope and Linear Functions*** • Developing an algebraic definition of slope • Proving, using similarity, that a line has a constant slope • Understanding the significance of a negative slope for a graph and an applied context • Seeing that the slope of a line is equal to the coefficient of x in the $y = a + bx$ representation of the line • Using slope to develop equations for lines	Can students use exponential and logarithmic functions and describe their graphs? Do students understand the relationship between logarithms and exponents? Do students understand that the derivative of an exponential function is proportional to the value of the function? Can students use the general laws of exponents? Do students understand the meaning and significance of *e*? Can students approximate data with an exponential function? Can students define slope and understand its relationship to rate of change and to equations for straight lines? Can students develop equations for straight lines from two points and from point-slope information? Can students apply various	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
constant percent rate per unit interval relative to another. **CC.F-LE.1c** Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two inputoutput pairs (include reading these from a table). **CC.F-LE.2** For exponential models, express as a logarithm the solution to $ab^{ct} = d$ where a, c, and d are numbers and the base b is 2, 10, or e; evaluate the logarithm using technology. **CC.F-LE.4** Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot). **CC.G-MG.2** Use a model function fitted to the data to solve problems in the context of the data. *Use given model functions or choose a function suggested by the context. Emphasize linear and exponential models.* **CC.S-ID.6a**	***Derivatives*** • Developing the concept of the derivative of a function at a point • Seeing that the derivative of a function at a point is the slope of the tangent line at that point • Finding numerical estimates for the derivatives of functions at specific points • Working with the derivative of a function as a function in itself • Realizing that for functions of the form $y = b^x$, the derivative at each point of the graph is proportional to the y-value at that point ***Exponential and Logarithmic Functions*** • Using exponential functions to model real-life situations • Strengthening understanding of logarithms • Reviewing and applying the principles that $a^b \bullet a^c = a^{b+c}$ and $(a^b)^c = a^{bc}$ • Understanding and using the fact that $a^{\log} a^b = b$ • Discovering that any exponential function can be expressed using any positive number other than 1 as a base • Learning the meaning of the terms *natural logarithm* and *common logarithm* • Using an exponential function to fit a curve to numerical data ***The Number e and Compound Interest*** • Estimating the value of b for which the function $y = b^x$ has a derivative at each point on its graph equal to the y-value at that point • Developing and using a formula for compound interest	formulas from coordinate geometry, including: • Distance formula? • Midpoint formula? • Equation of a circle with arbitrary center and radius? Can students find the distance from a point to a line? Do students understand the meaning of the derivative of a function at a point and its relationship to instantaneous rate of change? Can students approximate the value of a derivative at a given point?	

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
	• Seeing that expressions of the form $(1+1/n)^n$ have a limiting value, called *e*, as *n* increases without bound • Learning that the limiting value *e* is the same number as the special base for exponential functions		
Unit Four: Pennant Fever **Timeline: 10 days**			
Prove polynomial identities and use them to describe numerical relationships. For example, the polynomial identity $(x^2 + y^2)^2 = (x^2 – y^2)^2 + (2xy)^2$ *can be used to generate Pythagorean triples.* **CC.A-APR.4** – *unit supplement to be developed* Know and apply the Binomial Theorem for the expansion of $(x + y)^n$ in powers of *x* and *y* for a positive integer *n*, where *x* and *y* are any numbers, with coefficients determined for example by Pascal's Triangle. **CC.A-APR.5** Use permutations and combinations to compute probabilities of compound events and solve problems. **CC.S-CP.9**	The main concepts and skills that students will encounter and practice during this unit are: ***Probability and statistics*** • Developing a mathematical model for a complex probability situation • Using area diagrams and tree diagrams to find and explain probabilities • Using a simulation to understand a situation, to help analyze probabilities, and to support a theoretical analysis • Finding expected value • Finding and using probabilities for sequences of events • Using specific problem contexts to develop the binomial distribution and finding a formula for the associated probabilities • Using probability to evaluate null hypotheses ***Counting principles*** • Developing systematic lists for complex situations • Using the multiplication principle for choosing one element from each of several sets • Defining and using the concepts of permutation and combination	Can students apply principles for finding the probability for a sequence of events? Can students systematically list possibilities for complex problems? Can students use combinatorial and permutation coefficients in the context of real-world situations, and understanding the distinction between combinations and permutations? Can student use Pascal's triangle? Can students use the binomial distribution? Can students express the physical laws of falling bodies in terms of quadratic functions?	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
	• Understanding and using standard notation for counting permutations and combinations • Developing formulas for the permutation and combinatorial coefficients ***Pascal's triangle and combinatorial coefficients*** • Finding patterns and properties within Pascal's triangle • Recognizing that Pascal's triangle consists of combinatorial coefficients • Explaining the defining pattern and other properties of Pascal's triangle using the meaning of combinatorial coefficients • Developing and explaining the binomial theorem		
Unit Five: High Dive **Timeline: 16 days**			
Interpret complicated expressions by viewing one or more of their parts as a single entity. *For example, interpret* $P(1+r)^n$ *as the product of P and a factor not depending on P.* **CC.A-SSE.1b** *Rewrite simple rational expressions in different forms; write a(x)/b(x) in the form q(x) + r(x)/b(x), where a(x), b(x), q(x), and r(x) are polynomials with the degree of r(x) less than the degree of b(x), using inspection, long division, or, for the more complicated examples, a computer algebra system.* **CC.A-APR.6** – *unit supplement to be developed* *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.* **CC.A-APR.7** – *supplementary unit is being developed by publisher*	The main concepts and skills that students will encounter and practice during this unit are: ***Trigonometry*** • Extending the trigonometric functions to all angles • Reinforcing the importance of similarity in the definitions of the trigonometric functions • Graphing the trigonometric functions and variations on those functions • Defining the inverse trigonometric functions and principal values • Discovering and explaining the Pythagorean identity $\sin^2\theta + \cos^2\theta = 1$, and other trigonometric identities • Defining polar coordinates and finding rectangular coordinates from	Can students apply right-triangle trigonometry to real-world situations? Can students extend the right-triangle trigonometric functions to circular functions? Can students use trigonometric functions to work with polar coordinates? Can students define radian measure? Can students graph the sine and cosine functions and variations of these functions? Can students use inverse	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
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.F-IF.4** Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude. **CC.F-IF.7e** 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.F-TF.2** Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline. **CC.F-TF.5** 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.F-TF.7** Prove the Pythagorean identity $\sin^2(\theta) + \cos^2(\theta) = 1$ and use it to calculate trigonometric ratios. **CC.F-TF.8**	polar coordinates and vice versa ***Physics*** • Developing quadratic expressions for the height of free-falling objects, based on the principle of constant acceleration • Recognizing that a person falling from a moving object will follow a different path than someone falling from a stationary object ***Quadratic Equations*** • Developing simple quadratic equations to describe the behavior of falling objects	trigonometric functions? Can students apply various trigonometric formulas, including: • The Pythagorean identity? • Formulas for the sine and cosine of a sum of angles? • The law of sines and the law of cosines?	

Assessment Opportunities in this Unit:

End-of-Unit Assessments: Each unit concludes with in-class and take-home assessments. The in-class assessment is intentionally short so that time pressures will not affect student performance. Students may use graphing calculators and their notes from previous work when they take the assessments.

On-Going Assessments:
Ongoing assessment includes the daily work of determining how well students understand key ideas and what level of achievement they have attained in acquiring key skills. Students' written and oral work provides many opportunities for teachers to gather this information.

- *Sprinkler in the Orchard*
- *Proving with Distance—Part I or Proving with Distance—Part II*

- *Polygoning the Circle*
- *Orchard Growth Revisited*
- *Cable Ready*
- *Hiding in the Orchard*
- Presentations of *Programming Puzzles*
- Presentations or write-ups of *Just the Plane Facts*
- *Three Variables, Continued*
- *Matrices in the Oven*
- *Inverses and Equations*
- Presentations of *Meadows or Malls? Revisited*
- *How Many More People?*
- *Points, Slopes, and Equations*
- *Photo Finish*
- *What's It All About?*
- *Slippery Slopes*
- *Return to "A Crowded Place"*
- *Baseball Probabilities*
- *How Likely Is All Wins?*
- *Monthly Matches*
- *Cones from Bowls, Bowls from Cones*
- *Who's on First?*
- *About Bias*
- *Race for the Pennant Revisited*
- *As the Ferris Wheel Turns*
- *Testing the Definition*
- *More Beach Adventures*
- *A Practice Jump*
- *Moving Cart, Turning Ferris Wheel*

NOTE: When developed in Phase II, individual units will better define the assessment tools and demonstrate how they will be used formatively and summative.

Interactive Mathematics Program Curriculum Framework

School: The Delaware Met **Curricular Tool: IMP** **Grade or Course Year 4 (grade 12)**

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
Unit One: The Diver Returns **Timeline: 15 days**			
Know there is a complex number i such that $i2 = –1$, and every complex number has the form $a + bi$ with a and b real. **CC.N-CN.1** Use the relation $i2 = –1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers. **CC.N-CN.2** Find the conjugate of a complex number; use conjugates to find moduli and quotients of complex numbers. **CC.N-CN.3** 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. **CC.N-CN.4** *Represent addition, subtraction, multiplication, and conjugation of complex numbers geometrically on the complex plane; use properties of this representation for computation. For example, (1 – √3i)3 = 8 because (1 – √3i) has modulus 2 and argument 120°.* ***CC.N-CN.5*** *- supplementary lesson is being developed by publisher* *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 endpoints.* ***CC.N-CN.6*** *– supplementary lesson is being developed by publisher*	This unit uses key ideas from *High Dive*, including the extension of the trigonometric functions and the physics of objects falling from rest. The unit builds on those ideas, especially extending the physics principles to include motion with both horizontal and vertical initial components, which students learn to express as vectors. This leads to a study of quadratic equations and the need to express a solution in terms of the coefficients. That work culminates in the development of the quadratic formula and an introduction of complex numbers. The main concepts and skills that students will encounter and practice during the unit are summarized below. ***Trigonometry and Geometry*** • Using the extended trigonometric functions • Applying the principle that the tangent to a circle is perpendicular to the radius at the point of tangency ***Physics*** • Reinforcing the idea that a person falling from a moving object will follow a different path than someone falling from a stationary object • Expressing velocity in terms of vertical and horizontal components • Representing the motion of falling objects when the vertical and horizontal components of the initial velocity are both nonzero ***Quadratic Equations*** • Recognizing the importance of quadratic equations in the analysis of falling objects • Developing the quadratic formula	Can students apply the quadratic formula? Can students express the physical laws of falling bodies in terms of quadratic functions? Can students use complex numbers to solve certain quadratic equations? Can students extend right-triangle trigonometric functions to circular functions?	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
Solve quadratic equations with real coefficients that have complex solutions. **CC.N-CN.7** *Extend polynomial identities to the complex numbers. For example, rewrite x2 + 4 as (x + 2i)(x – 2i).* ***CC.N-CN.8*** *– supplementary lesson is being developed by publisher* *Know the Fundamental Theorem of Algebra; show that it is true for quadratic polynomials.* ***CC.N-CN.9*** *– supplementary lesson is being developed by publisher* 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., $\boldsymbol{v}$, $\lvert\boldsymbol{v}\rvert$, $\lVert\boldsymbol{v}\rVert$, $\boldsymbol{v}$). **CC.N.VM.1** Find the components of a vector by subtracting the coordinates of an initial point from the coordinates of a terminal point. **CC.N-VM.2** Solve problems involving velocity and other quantities that can be represented by vectors. **CC.N-VM.3** Add vectors end-to-end, componentwise, and by the parallelogram rule. Understand that the magnitude of a sum of two vectors is typically not the sum of the magnitudes. **CC.N-VM.4a** Given two vectors in magnitude and direction form, determine the magnitude and direction of their sum. **CC.N-VM.4b** Understand vector subtraction $\boldsymbol{v} - \boldsymbol{w}$ as $\boldsymbol{v} + (-\boldsymbol{w})$, where $-\boldsymbol{w}$ is the additive inverse of $\boldsymbol{w}$, with the same magnitude as $\boldsymbol{w}$ and pointing in the	• Using the quadratic formula to solve quadratic equations • Finding a general solution for the falling time of objects with an initial vertical velocity ***Complex Numbers*** • Seeing the need to extend the number system to solve certain quadratic equations • Establishing basic ideas about complex number arithmetic • Representing complex numbers in the plane and seeing addition of complex numbers as a vector sum		

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
opposite direction. Represent vector subtraction graphically by connecting the tips in the appropriate order, and perform vector subtraction component-wise. **CC.N-VM.4c** *Represent scalar multiplication graphically by scaling vectors and possibly reversing their direction; perform scalar multiplication component-wise, e.g., as c(vx, vy) = (cvx, cvy).* ***CC.N-VM.5a*** *– supplementary lesson is being developed by publishers* *Compute the magnitude of a scalar multiple c**v** using ||c**v**|| = |c|**v**. Compute the direction of c**v** knowing that when |c|**v** ≠ 0, the direction of c**v** is either along **v** (for c > 0) or against **v** (for c < 0).* ***CC.N-VM.5b****-supplementary lesson is being developed by publisher*			
Unit Two: The World of Functions **Timeline: 22 days**			
Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior. **CC.F-IF.7c** Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior. **CC.F-IF.7d** 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.F-BF.1b** 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*	Over the course of this unit, students develop a wide range of ideas about functions. The main concepts and skills that students will encounter and practice during the unit are summarized below. ***General Notions Regarding Functions*** • Recognizing four ways of representing a function—tabular, graphical, algebraic, and situational—and moving from one representation to another • Formally defining functions as sets of ordered pairs • Reviewing some basic families of functions ***Properties of Specific Families of Functions*** • Finding, describing, and proving patterns in the tables of linear, quadratic, cubic, and exponential functions based on the algebraic form of the functions	Can students apply families of functions from several perspectives: • Through their algebraic representations? • In relationship to their graphs? • As tables of values? • In terms of real-world situations that they describe? Can students describe the effect of changing parameters on functions in a given family? Can students describe end behavior and asymptotes of	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
the location of the weather balloon as a function of time. **CC.F-BF.1c** Find inverse functions. **CC.F-BF.4** *Produce an invertible function from a non-invertible function by restricting the domain.* **CC.F-BF.4d** – *unit supplement to be developed* *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.F-TF.6** – *supplementary lesson is being developed by the publisher*	• Seeing the sets of linear and exponential functions as two-parameter families and comparing the two types of growth • Applying the concepts of direct and inverse proportionality and constants of proportionality • Using absolute value functions and step functions to model problem situations • Using rational functions to model problem situations ***End Behavior and Asymptotes of Functions*** • Finding vertical and horizontal asymptotes for specific functions and finding functions with given asymptotes • Relating asymptotic behavior to situations • Characterizing end behavior of functions and finding the behavior of particular functions ***Fitting Functions to Data*** • Finding the specific function in a given family to fit a given situation or set of data • Developing a measure of "quality of fit" of a function to a set of data • Applying the least-squares criterion for quality of fit • Using a calculator's regression feature to find a function that fits a given set of data ***Combining and Modifying Functions*** • Arithmetic operations on functions —Describing situations using arithmetic combinations of functions —Relating arithmetic operations on functions to graphs —Formally defining arithmetic operations on functions • Composite Functions —Developing the concept of composition of functions based on situations —Defining composition notation —Establishing that composition is not commutative	rational functions? Can students apply the algebra of functions, including composition and inverse functions? Can students explain the least-squares approximation and use a calculator's regression capability to do curve-fitting?	

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
	—Composing and decomposing functions • Inverse functions —Formally defining the concept of inverse function —Finding a general algebraic equation for the inverse of a linear function —Relating the concept of inverse function to graphs, tables, and situations —Seeing that the graph of an inverse function is a reflection of the graph of the original function • Transformations of functions —Finding the graphs and tables of transformations of functions —Using functional notation and understanding its use in characterizing the transformations of functions		
Unit Three: The Pollster's Dilemma **Timeline: 18 days**			
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.	The main concepts and skills that students will encounter and practice during the unit are summarized below. ***General Sampling Concepts*** • Establishing methods of good polling, including random sampling • Using sampling from a known population to analyze the reliability of samples • Distinguishing between sampling with replacement and sampling without replacement, and comparing the two methods • Using the terminology true proportion and sample proportion • Identifying simplifying assumptions in analyzing sampling ***Specific Results on Sampling with Replacement*** • Making probability bar graphs for various distributions • Developing the concept of a theoretical distribution for sampling results from a	Can students use a binomial distribution to model a polling situation? Can students distinguish between sampling with replacement and sampling without replacement? Do students understand that the central limit theorem is a statement about approximating a binomial distribution by a normal distribution? Can students use area estimates to understand and use a normal distribution table? Can students extend concepts of mean and standard deviation from sets of data to probability distributions?	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
	given population • Using combinatorial coefficients to find the theoretical distribution of poll results for polls of various sizes • Generalizing that sampling results fit a binomial distribution ***The Central Limit Theorem and the Normal Distribution*** • Seeing intuitively that as poll size increases, the distribution of sample proportions becomes approximately normal • Reviewing the concept of normal distribution • Using estimates of areas to understand the normal distribution table • Applying the central limit theorem for the case of binomial distributions ***Mean and Standard Deviation*** • Reviewing the steps for computation of standard deviation • Seeing that the "large number of trials" method for computing mean and standard deviation is independent of the number of trials • Extending the concepts of mean and standard deviation from sets of data to probability distributions • Defining the concept of variance • Finding formulas for the mean and standard deviation of the distribution of poll results in terms of the poll size and the true proportion • Deciding what to use for σ if the true proportion is unknown, and finding the maximum value of σ for polling problems ***Confidence Levels and Margin of Error*** • Using the terminology confidence level, confidence interval, and margin of error • Seeing how poll size affects the standard	Can students create formulas for mean and standard deviation for binomial sampling situations? Can students use the normal approximation for binomial sampling to assess the significance of poll results? Can students apply the concepts of confidence interval, confidence level, and margin of error? Do students understand the relationship between poll size and margin of error?	

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
	deviation of poll results • Establishing confidence intervals in terms of sample proportions and standard deviation • Seeing how the term margin of error is commonly used in news reporting • Estimating the size of a poll based on the reported margin of error		
Unit Four: How Much? How Fast? **Timeline: 14 days**			
Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle. **CC.F-TF.1** 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, cosines, and tangent for x, $\pi + x$, and $2\pi - x$ in terms of their values for x, where x is any real number. **CC.F-TF.3** Use the unit circle to explain symmetry (odd and even) and periodicity of trigonometric functions. **CC.F-TF.4** *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.* ***CC.G-C.5*** *– supplementary lesson is being developed by the publisher*	This unit focuses on key ideas and techniques from calculus and their applications in various settings. The main concepts and skills that students will encounter and practice during the unit are summarized below. ***Accumulation*** • Recognizing that the area under a rate curve represents an accumulation • Estimating amount of total accumulation based on linear approximations of a situation • Creating and analyzing graphs for accumulation as a function of time ***Derivatives*** • Reviewing the concept of a derivative as an instantaneous rate of change • Estimating derivatives from graphs • Developing formulas for derivatives of simple polynomial functions • Developing formulas for derivatives of the sine and cosine functions • Establishing principles for the derivative of a sum or constant multiple ***The Fundamental Theorem of Calculus*** • Seeing that an accumulation function is an antiderivative of the corresponding rate function • Finding areas and volumes using	Can students estimate derivatives from graphs, and develop formulas for derivatives of some basic functions? Do students understand accumulation as the antiderivative of a corresponding rate function? Can students define radian measure?	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
	antiderivatives ***Trigonometry*** • Defining radian measure • Using radians in sine and cosine functions ***Geometry*** • Developing formulas for the volumes of pyramids and cones		
Unit Five: As the Cube Turns **Timeline: 25 days**			
Prove the addition and subtraction formulas for sine, cosine, and tangent and use them to solve problems. **CC.F-TF.9** Model 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 stretch in a specific direction). **CC.G-CO.2** Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself. **CC.G-CO.3** Develop definitions of rotations, reflections and translations in terms of angles, circles, perpendicular lines, parallel lines and line segments. **CC.G-CO.4** Given a specified rotation, reflection or translation and a geometric figure, construct the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Construct a sequence of transformations that will carry a given figure onto another. **CC.G-CO.5** Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of	The main concepts and skills that students will encounter and practice during the unit are summarized below. ***Coordinate Geometry*** • Expressing geometric transformations—translations, rotations, and reflections—in terms of coordinates in two and three dimensions • Finding coordinates a fractional distance along a line segment in two and three dimensions • Reviewing graphing in three dimensions • Finding the projection of a point onto a plane from the perspective of a fixed point and developing an algebraic description of the projection process • Studying the effect of change of viewpoint on projections • Reviewing polar coordinates ***Matrices*** • Reviewing the algebra of matrices • Using matrices to express geometric transformations in two and three dimensions ***Programming*** • Learning to use a technical manual • Using loops in programming • Understanding programs from their code • Designing and programming animations ***Synthetic Geometry and Trigonometry*** • Reviewing formulas relating the sine of an	Can students express geometric transformations—translations, rotations, and reflections—in analytic terms? Can students use matrices to represent geometric transformations? Can students develop an analytic expression for projection onto a plane from a point perspective? Can students represent a line in 3-dimensional space algebraically? Can students create programming loops? Can students write and interpret programs? Can students use a graphing calculator to create programs involving animation?	All assessments are listed at the end of the curriculum map.

Standards Alignment	Unit Concepts / Big Ideas from *IMP*	Essential Questions	Assessment
two-dimensional objects. **CC.G-GMD.4**	angle to the cosine of a related angle • Deriving the formula for the area of a triangle in terms of the lengths of two sides and the sine of the included angle • Deriving formulas for the sine and cosine of the negative of an angle • Deriving formulas for the sine and cosine of the sum of two angles and related variations		

Assessment Opportunities in this Unit:

End-of-Unit Assessments: Each unit concludes with in-class and take-home assessments. The in-class assessment is intentionally short so that time pressures will not affect student performance. Students may use graphing calculators and their notes from previous work when they take the assessments.

On-Going Assessments:
Ongoing assessment includes the daily work of determining how well students understand key ideas and what level of achievement they have attained in acquiring key skills. Students' written and oral work provides many opportunities for teachers to gather this information.

- *As the Ferris Wheel Turns*
- *Free Fall*
- *The Simplified Dive, Revisited*
- *Big Push*
- *Complex Numbers and Quadratic Equations*
- *Three O'clock Drop*
- *Vector Velocities*
- *The Diver's Success*
- *What Good Are Functions?*
- *Exponential Tables*
- *Families Have Many Different Members*
- *Name That Family!*
- *The Cost of Pollution*
- *Better Braking*
- *Graphs of the Theory*
- *Gifts Aren't Always Free*
- *A Normal Poll*
- *The Search Is On!*
- *What Does It Mean?*
- *"The Pollster's Dilemma" Revisited*
- *Leaky Faucet*

- *A Distance Graph*
- *Zero to Sixty*
- *A Pyramid of Bright Ideas*
- *A Solar Summary*
- *Learning the Loops*
- *Move That Line!*
- *Oh, Say What You Can See*
- *Swing That Line!*
- *And Fred Brings the Lunch*
- *Find Those Corners!*
- *Work on POW 9: An Animated POW (The outline is turned in for An Animated Outline, the write-up is turned in for An Animated POW Write-up, and presentations are made following that.)*

NOTE: When developed in Phase II, individual units will better define the assessment tools and demonstrate how they will be used formatively and summative.

Lifetime Fitness Curriculum Map

School: The Delaware Met **Curricular Tool:** N/A **Course:** Physical Education 9-12

<table>
<tr><th>Standards Alignment</th><th>Unit Concepts</th><th>Essential Questions</th><th>Assessments</th></tr>
<tr><td colspan="4">Module One: Introduction to Physical Education and Fitness Concepts
Timeline : 9 lessons</td></tr>
<tr><td rowspan="2">Standard 3 – Participates in regularly in physical activity.

Standard 4 – Achieves and maintains a health-enhancing level of physical fitness.

Standard 5 – Exhibits responsible personal and social behavior that respects self and others in physical activity settings.

Standard 6 – Creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction through physical activity.
.</td><td><u>Enduring Understandings:</u>
Participation in fitness activities can be fun.

How fitness components promote a healthy lifestyle.

Fitness is a personal choice.

<u>Module Concepts:</u>
Students will describe various fitness concepts
• flexibility
• cardiovascular endurance
• muscular Strength
• muscular Endurance
• agility

Students will learn movement concepts necessary for physical activity and explain how
• to move safely in a general space to avoid injury
• aerobic activities impacts physical and mental health
• to build muscular strength and endurance
• agility impacts physical activity
• to calculate body composition and explain why it matters
• physical activity impacts overall health
• to improve physical fitness and create a list of activities that builds fitness and explain the benefits of physical activity/physical education.

Students will participate in
• goal setting using the information obtained from the fitnessgram assessment
• a class discussion that will center around how fitness components promote a healthy lifestyle.</td><td><u>Essential Questions:</u>
Why is physical fitness good for you?

How can I have fun moving?

What are the personal and social behavioral expectations in physical activity settings?

What can I do to be physically active throughout my life?

What personal meanings do I find through participation in physical activity?</td><td><u>Informal:</u>
• Teacher observation
• Student behavior

<u>Formal Assessment:</u>
• Exit Slip
• Graphing Worksheets
• Transfer task
• Physical activity log

<u>Fitnessgram Assessment:</u>
• Student test scores entered into the fitnessgram program
• Completed fitness plan</td></tr>
<tr><td colspan="2">Lifetime Fitness Applications:
• YMCA Partnership – Group exercise classes (aerobics, step, Zumba, yoga, etc.), introduction to weight training, spinning class, swimming
• Empowered Yoga
• Mountain biking adventures
• Walking for Fitness Club
• 5K conditioning Club
• Wilmington Youth Rowing Association</td></tr>
</table>

Standards Alignment	Unit Concepts	Essential Questions	Assessments
Module Two: Team Building (DDOE Unit) and Team Sports **Timeline: 9 lessons**			
Standard 5 – Exhibits responsible personal and social behavior that respects self and others in physical activity settings.	**Enduring Understandings:** Physical activity performed safely prevents injuries. Resolving conflict in a physical activity setting leads to a more enjoyable experience. Teambuilding develops leadership skills as students complete tasks with a group. Trust is an integral part of building relationships. **Module Concepts:** Students will be able to • listen to other peoples ideas • effectively resolve conflicts during activities • demonstrate self-control • trust and depend on teammates	**Essential Questions:** What are personal and social behavioral expectations in physical settings?	**Informal:** • Teacher observations **Formal Assessment:** • Journaling of the debriefing questions • Challenge Worksheet • Student check sheet for presenting • Transfer task • Written rules of roles and regulations
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.	**Enduring Understandings:** The concepts of movement will improve performance of a specific skill and provide the foundation for variety of sports and activities. Effective offensive and defensive strategies are both necessary for game situations. Integrating fitness concepts and skills into your everyday routine that supports wellness. **Module Concepts:** 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,	**Essential Questions:** How do I make motor skills and physical activity and integral part of my life? What concepts, principles, strategies and tactics apply to team sports? What personal meaning do I find through participation in physical activity on a team? Lifetime Fitness Applications: • YMCA Partnership – Swimming relays, basketball, racquetball, squash, volleyball, indoor soccer • Mountain biking adventures –race teams • 5K running relays • Wilmington Youth Rowing Association	**Informal:** • Teacher observation **Formal Assessment:** • Skills worksheet • Written test of rules and regulations • Transfer task • Physical activity log

Standards Alignment	Unit Concepts	Essential Questions	Assessments
	and agility • understanding and assess tactical understanding using offensive and defensive strategies in applied settings, • investigate the impact of rules and regulations on the game, • how participating in a sport can impact our health.		
Module Three: Walking for a Lifetime of Fitness (DDOE Unit) and Individual Sports **Timeline: 9 lessons**			
Standard 3 – Participates in regularly in physical activity. **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.	**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. **Module Concepts:** Students will know • proper stretching for 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, 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	**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?	**Informal:** • Teacher observation ofproper pedometer usage **Formal Assessment:** • Guess Your Steps Worksheet • Scavenger Hunt Worksheet • Individual Walking Logs • Transfer task
Standard 1 – Demonstrates competency in motor skills and movement patterns needed to perform a variety	**Enduring Understandings:** Performing movement skills in a technically correct manner protects your muscular and skeletal systems.	**Essential Questions:** How do I make motor skills and physical activity and integral part of my life?	**Informal:** • Teacher observation

<table>
<tr><th>Standards Alignment</th><th>Unit Concepts</th><th>Essential Questions</th><th>Assessments</th></tr>
<tr><td rowspan="2">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.</td><td>Understand concepts of movement will improve performance of a specific skill and provide the foundation for variety of sports and activities.

Integrating fitness concepts and skills into your everyday routine supports wellness.

<u>Module Concepts:</u>
Students will be able to
• demonstrate technically 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
• explain the impact of rules and regulations on the game and how participating in a sport can impact our health.</td><td>What concepts principles, strategies and tactics do apply to specific physical activity?

What personal meaning do I find through participation in physical activity?</td><td><u>Formal Assessment:</u>
• Skills worksheet
• Written test of rules and regulations
• Various worksheets
• Transfer task</td></tr>
<tr><td colspan="2">Lifetime Fitness Applications:
• YMCA Partnership – Group exercise classes (aerobics, step, Zumba, yoga, etc.), introduction to weight training, spinning class, swimming
• Empowered Yoga
• Mountain biking adventures
• Walking for Fitness Club
• 5K conditioning Club
• Wilmington Youth Rowing Association</td></tr>
<tr><td colspan="4">Module Four: Lifetime of Physical Activity and Fitness Gram Post-Test
Timeline: 9 lessons</td></tr>
<tr><td>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.</td><td><u>Enduring Understandings:</u>
Participation in fitness activities can be fun.

How fitness components promote a healthy lifestyle.

Fitness is a personal choice.

<u>Module Concepts:</u>
Students will be able to
• explain how to improve physical fitness
• create a list of activities that builds fitness
• research a list of places in the community that are available for physical fitness activities
• explain the benefits of physical activity</td><td><u>Essential Questions:</u>
Why is physical fitness good for you?

How can I have fun moving?

What can I do to be physically active throughout my life?

What personal meanings do I find through participation in physical activity?</td><td><u>Informal:</u>
• Teacher Observation

<u>Formal Assessment:</u>
• Student test scores entered into the fitnessgram program
• PE Module Project
• Personal Fitness Plan and Resource List

<u>Fitness Gram Assessment:</u>
• Student test scores entered into the fitnessgram program</td></tr>
</table>

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Standard 4 – Achieves and maintains a health-enhancing level of physical fitness.

Standard 5 – Exhibits responsible personal and social behavior that respects self and others in physical activity settings.

Standard 6 - Creates opportunities for health, enjoyment, challenge, self-expression, and/or social interaction through physical activity.</td><td rowspan="2">• develop a PE module to be taught to freshman
• develop a fitness plan for themselves for their junior and senior years of high school.</td><td></td><td>• Reflection on the effectiveness of the fitness plan</td></tr>
<tr><td colspan="2">Lifetime Fitness Applications:
• YMCA Partnership – Group exercise classes (aerobics, step, Zumba, yoga, etc.), weight training, spinning class, swimming, squash, racquetball, basketball, volleyball
• Empowered Yoga
• Mountain Biking Adventures
• Walking for Fitness Team
• 5K Running Team
• Wilmington Youth Rowing Association
• Orienteering and Geo-caching
• Backcountry hiking and mountain climbing</td></tr>
</table>

Curriculum Framework for Health

School: The Delaware Met **Curricular Tool:** DDOE Units/HealthTeacher.com **Grade:** 9-12

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
Unit One: Health and Your Wellness **Timeline : 10 classes**			
Standard 1 –Students will understand essential health concepts in order to transfer knowledge into healthy actions for life. **Standard 2** – Students will analyze the influence of family, peers, culture, media, technology and other factors on health behaviors. **Standard 3** – Students will demonstrate the ability to access information, products and services to enhance health. **Standard 4** – Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks. **Standard 5** – Students will demonstrate the ability to use decision-making skills to enhance health. **Standard 6** – Students will demonstrate the ability to use goal setting skills to enhance health. **Standard 7** – Students will demonstrate the ability to practice health-enhancing and avoid or reduce health risks. (self-management)	Health is personal power and enhances the quality of life. The environment, lifestyle, family history, peers and other factors impact physical, social, mental and emotional health. Culture, values (e.g., individual, family and community) media and use of technology (e.g., television, computers, MP3 Players, electronic/arcade games) can influence personal behavioral choices. Several factors influence the formation, achievement, and evaluation of a long-term personal health plan.	How can you distinguish between controllable risk factors and uncontrollable risk factors? How can the six components of health contribute to a healthy lifestyle? How can good communication around health with the advisor be important? How can we differentiate between passive, assertive, and aggressive communication styles?	**Informal:** • Teacher Observation • Journal entries • Lesson check up questions • Participation in class discussions **Formal Assessment:** • Concept Review worksheets • Section review & quizzes • Unit test • Develop an action plan to achieve a personal goal • Skit • Rubrics • Informational pamphlet

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
Standard 8 – Students will demonstrate the ability to advocate for personal, family, and community health.			
Unit Two: Healthy Eating for Life (DE Model Unit) **Timeline: 5-7 classes**			
Standard 1 –Students will understand essential health concepts in order to transfer knowledge into healthy actions for life. **Standard 2** – Students will analyze the influence of family, peers, culture, media, technology and other factors on health behaviors. **Standard 4** – Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks. **Standard 5** – Students will demonstrate the ability to use decision-making skills to enhance health. **Standard 6** – Students will demonstrate the ability to use goal setting skills to enhance health. **Standard 7** – Students will demonstrate the ability to practice health-enhancing and avoid or reduce health risks. (self-management) **Standard 8** – Students will demonstrate the ability to advocate for personal, family, and community health.	Health Is Personal Power 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.	What is Health? What prevents people from practicing healthy behavior? 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? **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.	**Informal:** • Teacher Observation • Journal • Lesson check up questions • Participation in class discussions • Webquest • Fast food findings • Interpretation of nutrition on food labels • Shopping list **Formal Assessment:** • Concept Review worksheets • Section review & quizzes • Reteaching worksheet • Transfer task • Create eating plan • Rubrics • Food diary and diet analysis • Self assessment and reflection

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
		• Examine current eating choices. • Explore healthy eating options. • Present and share information with classmates. • Maintain a reflective journal.	
Unit Three: Fact or Fiction: Alcohol and Tobacco (DE Model Unit) **Timeline: 5 -7 classes**			
Standard 1 –Students will understand essential health concepts in order to transfer knowledge into healthy actions for life. **Standard 2** – Students will analyze the influence of family, peers, culture, media, technology and other factors on health behaviors. **Standard 3** – Students will demonstrate the ability to access information, products and services to enhance health. **Standard 4** – Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks. **Standard 5** – Students will demonstrate the ability to use decision-making skills to enhance health. **Standard 6** – Students will demonstrate the ability to use goal setting skills to enhance health. **Standard 7** – Students will demonstrate the ability to practice	Health is Personal Power Avoiding alcohol and tobacco is achieved through the understanding and application of resistance skills.	What is Health? What prevents people from practicing healthy behavior? How do personal goals, knowledge and values influence alcohol & tobacco use? **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.	**Informal:** • Teacher Observation • Journal • Lesson check up questions • Participation in class discussions • Student self assessment and reflection **Formal Assessment:** • Concept Review worksheets • Section review & quizzes • Reteaching worksheet • Unit test • Transfer task • Informational pamphlet • Rubrics • Powerpoint presentation

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
health-enhancing and avoid or reduce health risks. (self-management) **Standard 8** – Students will demonstrate the ability to advocate for personal, family, and community health.		• Access local cessation programs.	
Unit Four: Diseases and Disorders **Timeline: 8-10 classes**			
Standard 1 –Students will understand essential health concepts in order to transfer knowledge into healthy actions for life. **Standard 2** – Students will analyze the influence of family, peers, culture, media, technology and other factors on health behaviors. **Standard 3** – Students will demonstrate the ability to access information, products and services to enhance health. **Standard 4** – Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks. **Standard 5** – Students will demonstrate the ability to use decision-making skills to enhance health. **Standard 6** – Students will demonstrate the ability to use goal setting skills to enhance health. **Standard 7** – Students will demonstrate the ability to practice	Functional knowledge of health concepts impacts health behavior. Decision making is a process that impacts health. Goal setting enhances health outcomes. Adopting a healthy lifestyle improves the quality of life.	How can lifestyle lead to disease? What impact does my family have on the spread of diseases? Why can some risk factors for lifestyle diseases can be controlled? Why are some uncontrollable? How do infectious diseases spread? How can they be contained? How can you protect yourself through preventing the spread of infectious diseases? How does the body fight infectious diseases? What are five things I can do to stay well? Why are they important? How does immunity develop? What happens when some choose not to be vaccinated? How does heredity affect diseases?	**Informal:** • Teacher Observation • Journal • Lesson check up questions • Participation in class discussions **Formal Assessment:** • Concept Review worksheets • Section review & quizzes • Reteaching worksheet • Unit test • Transfer task

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
health-enhancing and avoid or reduce health risks. (self-management) **Standard 8** – Students will demonstrate the ability to advocate for personal, family, and community health.		What are the differences between cardiovascular diseases, cancer, AIDS, diabetes, and disabilities? Why do those differences matter? How do organizations in the community help to treat and prevent the spread of infectious diseases?	
Unit Five: Adolescents, Adulthood and Family Life **Timeline: 10 classes**			
Standard 1 –Students will understand essential health concepts in order to transfer knowledge into healthy actions for life. **Standard 2** – Students will analyze the influence of family, peers, culture, media, technology and other factors on health behaviors. **Standard 3** – Students will demonstrate the ability to access information, products and services to enhance health. Standard 4 – Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks. **Standard 5** – Students will demonstrate the ability to use decision-making skills to enhance health. **Standard 6** – Students will demonstrate the ability to use goal setting skills to enhance health. **Standard 7** – Students will	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.	How do boys and girls differ physically, mentally, emotionally, and socially during adolescence? How has adolescence affected your life? How have responsibilities shifted? How do the opportunities, concerns, and challenges of the three different stages of adulthood differ? How are they the same? What are the responsibilities of partners in a marriage? How can partners in a marriage work together to make sure that their marriage lasts? What should couples discuss prior to marriage? How does the arrive of children impact the family? How do responsibilities and roles in the marriage shift with the arrive of a child?	**Informal:** • Teacher Observation • Journal • Lesson check up questions • Participation in class discussions **Formal Assessment:** • Concept Review worksheets • Section review & quizzes • Reteaching worksheet • Unit test • Transfer task

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
demonstrate the ability to practice health-enhancing and avoid or reduce health risks. (self-management) **Standard 8** – Students will demonstrate the ability to advocate for personal, family, and community health.		How does teen-parenthood change your priorities and your life's plan? Why are family relationships important? What are the characteristics of healthy families? How do you cope with family problems? What can you do to make your family more healthy?	
Unit Six: Healthy Relationships (DE Model Unit) **Timeline: 7 classes**			
Standard 1 –Students will understand essential health concepts in order to transfer knowledge into healthy actions for life. **Standard 2** – Students will analyze the influence of family, peers, culture, media, technology and other factors on health behaviors. **Standard 3** – Students will demonstrate the ability to access information, products and services to enhance health. **Standard 4** – Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks. **Standard 5** – Students will demonstrate the ability to use decision-making skills to enhance health.	Health is personal power. 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.	How do I recognize and practice healthy relationships? How do my decisions and choices influence my relationships and those of others? 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	**Informal:** • Teacher Observation • Journal • Lesson check up questions • Participation in class discussions • Student self assessment and reflection **Formal Assessment:** • Concept Review worksheets • Section review & quizzes • Reteaching worksheet • Unit test • Transfer task • Informational pamphlet • Rubrics • Compare/contrast statement on abuse vs. equal power in a relationship. • Five-paragraph essay deconstructing a media message.

Standards Alignment	Unit Concept/Big Ideas	Essential Questions Student Learning Targets	Assessments
Standard 6 – Students will demonstrate the ability to use goal setting skills to enhance health. **Standard 7** – Students will demonstrate the ability to practice health-enhancing and avoid or reduce health risks. (self-management) **Standard 8** – Students will demonstrate the ability to advocate for personal, family, and community health.		• Practice how to communicate and set boundaries for a healthy relationship • Resist and challenge unhealthy cultural norms	

Curriculum Framework for Spanish I

School: Delaware Met **Curricular Tool: N/A** **Course: Level H1/Novice Low-Novice Mid**

Standards Alignment	Unit Concepts/ Big Ideas	Essential Questions/ Learning Targets	Assessments
Unit One: Mucho gusto **Timeline : 3 weeks**			
1.1 Interpersonal Communication-Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes. **1.3 Presentational Communication**- 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 **2.1 Cultural Practices and Perspectives**-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.	**Concepts:** Greetings Introductions Alphabet Numbers 0-30 Spanish-speaking countries & capitals Days of the week Weather Classroom expressions. **Big Ideas:** Across the globe, people have different concepts of greetings and salutations. .	**Essential Questions:** How do students introduce themselves? How do people from other cultures introduce themselves? **Learning Targets:** • Tell about a product or practice of their own culture and compare it to a similar product or practice of the targets culture. • Appropriately greet one another • Introduce themselves to each other and guests who visit the classroom.	**Suggested Formative Assessments** Interactive Word Wall Questioning Journaling Observation of oral discourse **Suggested Summative Assessments** Vocabulary quizzes Oral Presentation Rubrics Self Assessment
Unit Two: Tiempo con amigos **Timeline: 6 weeks**			
1.1 Interpersonal Communication -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes. **1.3 Presentational Communication**- Students write or tell about products or practice of their own	**Concepts:** Pasttimes Likes/dislikes (*gustar + infinitive)* Interrogative words Formal vs. informal you Personal prounouns and *ser* Noun/adjective agreement and placement	**Essential Questions:** What do students like to do and how does that compare with students from around the globe? **Learning Targets:** Identify pasttimes	**Suggested Formative Assessments** Interactive Word Wall Questioning Journaling Observation of oral discourse **Suggested Summative Assessments** Vocabulary quizzes

Standards Alignment	Unit Concepts/ Big Ideas	Essential Questions/ Learning Targets	Assessments
culture or the target language cultures. They use language supported by visual cues such as posters, pictures, props, etc **2.1 Cultural Practices and Perspectives** - 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. **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, mathematical terms and scientific information **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. **4.1 Language Comparisons**-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.	**Big Ideas** While differences exist due to culture and geography, students around the world share many common interests and join in similar activities.		Oral Presentation Rubrics Self Assessment
Unit Three: En la escuela- La Vida Universitaria-Model Unit **Timeline: 5 weeks**			
1.1 Interpersonal Communication -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes.	**Concepts:** Time and schedules Classes and descriptors Student life Irregular verbs (*estar*, *tener*, *ir*) Present tense of regular –ar verbs	**Essential Questions:** How can students describe their school experience? How do schools compare from culture-to-culture?	**Suggested Formative Assessments** Interactive Word Wall Questioning Journaling Observation of oral discourse

Standards Alignment	Unit Concepts/ Big Ideas	Essential Questions/ Learning Targets	Assessments
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. **1.3 Presentational 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 **2.1 Cultural Practices and Perspectives** - 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. **2.2 Cultural Products**-Students identify and observe tangible products of the culture 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	**Big Ideas:** Students around the world share similar schooling experiences although differences exist due to geography, resources, and culture. .	**Learning Targets** • Identify classes and extra-curricular activities in the target language • 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. • 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 • Express feelings and emotions in Spanish. • Form questions in Spanish.	**Suggested Summative Assessments** Vocabulary quizzes Oral Presentation Rubrics Self Assessment Performance Task

Standards Alignment	Unit Concepts/ Big Ideas	Essential Questions/ Learning Targets	Assessments
various media from the language and culture for entertainment or personal pleasure			
Unit Four: La mesa de la familia **Timeline: 6 weeks**			
1.1 Interpersonal Communication -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes. **1.3 Presentational 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 **2.1 Cultural Practices and Perspectives** - 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. **2.2 Cultural Products** - Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods. **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, mathematical terms and scientific information **3.2 Access to Information**- Students use sources intended for same age speakers of the target language to prepare reports on topics of personal	**Concepts:** Family Dates Numbers 200-1,000,000 Possessive adjectives Food, restaurants, table etiquette -er/-ir verbs; *gustar*; stem-changing verbs **Big Ideas:** Families share a sense of unity and tradition that often centers around mealtimes, cuisine, and celebrations .	**Essential Questions:** What is my definition of family? What do I eat that is "American"? What are some staple foods of target language countries? **Learning Targets:** • Identify the main idea of short stories in the target language • Research and identify career options where knowing a second language will be beneficial.	**Suggested Formative Assessments** Interactive Word Wall Questioning Journaling Observation of oral discourse Skit **Suggested Summative Assessments** Vocabulary quizzes Oral Presentation Rubrics Self Assessment Skit

Standards Alignment	Unit Concepts/ Big Ideas	Essential Questions/ Learning Targets	Assessments
interest or those with which they have limited previous experience. **4.1 Language Comparisons**- 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. **5.1 Transfer to Communities**-Students identify ways that knowing languages are crucial to many professions.			
Unit Five: Vamos de compras **Timeline: 5 weeks**			
1.1 Interpersonal Communication - Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic 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. **1.3 Presentational 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 **2.1 Cultural Practices and Perspectives** - Students observe, identify and discuss simple	**Concepts:** Clothing and shopping Vocabulary Getting around town Direct object pronouns People choose clothing that reflect their personal identity as well as their cultural heritage. **Big Ideas:** Culture and language are inseparable; they influence and reflect each other. Language learning provides opportunities to uncover big ideas about languages, cultures, and other disciplines.	**Essential Questions:** What clothing do teenagers wear? What cultural elements influence their choices? **Learning Targets:** • Oral presentation • Identify main ideas presented in media in the target culture	**Suggested Formative Assessments** Interactive Word Wall Questioning Journaling Observation of oral discourse **Suggested Summative Assessments** Vocabulary quizzes Oral Presentation Rubrics Self Assessment

Standards Alignment	Unit Concepts/ Big Ideas	Essential Questions/ Learning Targets	Assessments
patterns of behavior or interaction in various settings such as school, family and the community in the target language cultures. **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, mathematical terms and scientific information **4.1 Language Comparisons** - 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. **5.1- Transfer to Communities** Students identify ways that knowing languages are crucial to many professions.			
Unit Six: Bienvenido a nuestra casa (Model Unit-House and Home) **Timeline: 5 weeks**			
1.1 Interpersonal Communication - Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic 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. **1.3 Presentational Communication** - Students write or tell about products or practices of their	**Concepts:** Vocabulary related to rooms in the house, furniture, chore *ser vs. estar* *tu* affirmative commands Ordinal numbers **Big Ideas:** How people define a home differs according to culture, geography, and resources. Although houses share commonalities throughout the world, the notion of home is tied	**Essential Questions:** How does my definition of home compare to that of other students' from other cultures? How does the definition of chore differ depending on culture? What is a home? How and where do I live? How and where do people live in the countries where	**Suggested Formative Assessments** Interactive Word Wall Questioning Journaling Observation of oral discourse **Suggested Summative Assessments** Vocabulary quizzes Oral Presentation Rubrics Self Assessment Interpretive Tasks

Standards Alignment	Unit Concepts/ Big Ideas	Essential Questions/ Learning Targets	Assessments
own culture or the target language cultures. They use language supported by visual cues such as posters, pictures, process. etc **2.2 Cultural Products** - Students identify and observe tangible products of the culture 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** -Studetns 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	to one's culture and personal vision	the target language is spoken? What are my family's responsibilities and routines at home and how do they compare to those of the family in the target culture? **Learning Targets:** • 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 • 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	
Unit Seven: Mantener un cuerpo sano **Timeline: 5 weeks**			
1.1 Interpersonal Communication - Students introduce themselves and their classmates, name objects, places and actions and respond to	**Concepts:** Vocabulary related to health and emotion	**Essential Questions:** How do I express myself and my feelings to others?	**Suggested Formative Assessments** Interactive Word Wall Questioning

Standards Alignment	Unit Concepts/ Big Ideas	Essential Questions/ Learning Targets	Assessments
commands and questions. Student also express basic likes and dislikes. **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, process. etc **2.2 Cultural Products** - Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods. **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, mathematical terms and scientific information **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	Parts of the body Illnesses and remedies *Estar* Sports *Jugar* *Ssaber vs. conocer* Preterit of –ar verbs **Big Ideas:** A person's perception of health depends on cultural values related to physical definitions and emotional mores	How do I communicate my health or state of being to others? How does my definition of what it means to be healthy compare to that of someone from the target language culture? **Learning Targets:** • Identify tangible products of the culture. • Transfer knowledge of geographic features to the characteristics of Spanish speaking countries. • Identify similarities and differences in products and practices that are shared by the two cultures.	Journaling Observation of oral discourse Skit **Suggested Summative Assessments** Vocabulary quizzes Oral Presentation Rubrics Self Assessment Skit

Curriculum Framework for Spanish 2

School: Delaware Met **Curricular Tool: N/A** **Course: Level H2/ Novice Mid**

Standards Alignment	Unit Concepts/ Big Ideas	Essential Questions/ Learning Targets	Assessments
Unit One: Mis amigos y yo **Timeline : 5 weeks**			
1.1 Interpersonal Communication - Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes **1.2 Interpretive Communication** -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes **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** -Students identify and observe tangible products of the culture 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. **4.1 Language Comparisons**- -Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods.	**Concepts:** Definite and indefinite articles Subject pronouns Adjective agreement Present tense of regular and stem-changing verbs as well as *ser, estar, ir, tener,* and *gustar.* Vocabulary related to greetings, daily activities and hobbies, city destinations, personality, and state of being. **Big Ideas:** Although differences exist due to culture and geography, teenagers across the world share many commonalities in their relationships with friends.	**Essential Questions:** 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? **Learning Targets:** • Write about products and practices of the target culture. • Create visual aids to assist in delivering messages pertaining to the American and Spanish Culture.	**Suggested Formative Assessments** Interactive Word Wall Questioning Journaling Observation of oral discourse **Suggested Summative Assessment** Vocabulary quizzes Oral Presentation Rubrics Self Assessment GRASP task

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Standards Alignment	Unit Concepts/ Big Ideas	Essential Questions/ Learning Targets	Assessments
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.			
Unit Two: Vamos de viaje (Model Unit- Un viaje) **Timeline: 5 weeks**			
1.1 Interpersonal Communication - Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes **1.2 Interpretive Communication** -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes **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. **2.1 Cultural Practices and Perspectives** - 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. **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, mathematical terms	**Concepts:** Location prepositions direct and indirect object pronouns preterit of regular –ar verbs, *ir*, *ser*, *hacer*, *ver and dar.* Costa Rican national parks and ecosystems. Vocabulary related to airplane travel, lodging and vacation; giving and receiving directions **Big Ideas:** The concept of travel connotes different meaning to people according to their needs, resources, and experiences Travel provides opportunities to gain new insight about self and the world. Knowledge of different forms of transportation provides richer experiences while visiting unfamiliar places. The study of world language enables individuals to participate in	**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? How do I describe and use different forms of transportation to get around? What information do I need to plan a vacation in a foreign country? What do I need to obtain a driver's license in a Spanish-speaking country? What are the most visited points of interest in Venezuela and Colombia?	**Suggested Formative Assessments** Interactive Word Wall Questioning Journaling Observation of oral discourse **Suggested Summative Assessment** Vocabulary quizzes Oral Presentation Rubrics Self Assessment Performance task

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Standards Alignment	Unit Concepts/ Big Ideas	Essential Questions/ Learning Targets	Assessments
and scientific information. **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 identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods. **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. **5.1 Transfer to Communities**--Students contact local agencies to secure information regarding products or practices of target-language cultures.	multiple communities and enriches their experiences.	**Learning Targets:** • Identify five tourist points of interest, and state (write and speak) why one should visit. • Identify (list) the parts of a car in Spanish. • Use affirmative and negative commands correctly in Spanish. • Pronounce B and V correctly when speaking Spanish. • Obtain a driver's license in a Spanish-speaking country.	
Unit Three: Somos saludables **Timeline: 7 weeks**			
1.1 Interpersonal Communication - Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes **1.2 Interpretive Communication** -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes **1.3 Presentational Communication** - Students	**Concepts:** Vocabulary related to sports, healthy habits, daily routine, body parts, and personal care items. Sequencing of events adverbs (*-mente)* reflexive verbs and pronouns present progressive demonstrative adjectives and pronouns plans with *pensar* preterit of regular –er and –ir verbs	**Essential Questions:** What is your daily routine and how does that compare with that of a student from another culture? What is your definition of nutrition? How do you maintain your health? **Learning Targets:** • Identify daily routines and compare and contrast them	**Suggested Formative Assessments** Interactive Word Wall Questioning Journaling Observation of oral discourse **Suggested Summative Assessment** Vocabulary quizzes Oral Presentation Rubrics Self Assessment

Standards Alignment	Unit Concepts/ Big Ideas	Essential Questions/ Learning Targets	Assessments
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. **2.1 Cultural Practices and Perspectives** - 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 -**Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods. **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, mathematical terms and scientific information. **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. **4.1 Language Comparisons**- -Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods. **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.	**Big Ideas:** The definition of a nutritious, healthy lifestyle varies from culture to culture.	with a "day in the life" of a Spanish speaking student • Create a "menu" from a typical day of an American teenager and a Spanish teenager	

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Standards Alignment	Unit Concepts/ Big Ideas	Essential Questions/ Learning Targets	Assessments
5.2 Enjoyment/Lifelong Learning -Students use various media from the language and culture for entertainment or personal pleasure.			
Unit Four: Al centro comercial **Timeline: 7 weeks**			
1.1 Interpersonal Communication - Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes **1.2 Interpretive Communication** -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes **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**--Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods. **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, mathematical terms and scientific information. **4.1 Language Comparisons**--Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods.	**Concepts:** Vocabulary related to clothing and fit, personal needs, stores, materials, crafts, and recommendations. Verbs: *gustar: encantar, interesar, importer, quedar* Present tense irregular *yo* verbs Prepositions and pronouns Time expressions with *hace* Irregular preterit verbs: u stems, uv stems, i stems Stem-changing –ir verbs in the preterit Converting money and exchange rates. Spanish-speaking countries in the Caribbean; art, handicrafts, and markets. **Big Ideas** People shop out of necessity and for fun, whether it be for food, clothing or for gifts.	**Essential Questions:** How do your clothes and style compare to that of someone from another culture? Where do you shop? How is commerce different in Spanish-speaking countries? **Learning Targets:** • Compare and contrast fashion trends between your own and the Spanish culture. • Accurately exchange given amounts of money • Appropriately use verb forms	**Suggested Formative Assessments** Interactive Word Wall Questioning Journaling Observation of oral discourse **Suggested Summative Assessment** Vocabulary quizzes Oral Presentation Rubrics Self Assessment

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Standards Alignment	Unit Concepts/ Big Ideas	Essential Questions/ Learning Targets	Assessments
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.			
Unit Five: A comer **Timeline: 5 weeks**			
1.1 Interpersonal Communication - Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes **1.2 Interpretive Communication** -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes **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. **2.1 Cultural Practices and Perspectives** - 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**--Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods. **3.1 Connections to Other Disciplines**--Students demonstrate an understanding of the concepts	**Concepts:** Vocabulary related to food and food preparation, place settings, restaurant dishes and ordering Ud. and Uds. commands extremes (-isimo) affirmative and negative expressions **Big Ideas:** Food is symbolic to people of their cultural heritage and varies according to their socioeconomic status, geography, and tastes.	**Essential Questions:** How do your favorite foods compare with those of someone from another culture? How do you order in a restaurant? How do you prepare foods from another culture? **Learning Targets:** • Write and act out a skit of a scene in a restaurant • Accurately use affirmative and negative expression	**Suggested Formative Assessments** Interactive Word Wall Questioning Journaling Observation of oral discourse **Suggested Summative Assessment** Vocabulary quizzes Oral Presentation Rubrics Self Assessment

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Standards Alignment	Unit Concepts/ Big Ideas	Essential Questions/ Learning Targets	Assessments
learned in other subjects in the target language, including geographic terms and concepts, historical facts and concepts, mathematical terms and scientific information. **4.1 Language Comparisons** -Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods. **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.			
Unit Six: El arte y las peliculas **Timeline: 5 weeks**			
1.1 Interpersonal Communication - Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes **1.2 Interpretive Communication** -Students introduce themselves and their classmates, name objects, places and actions and respond to commands and questions. Student also express basic likes and dislikes **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. **2.1 Cultural Practices and Perspectives** - Students write or tell about products or practices of their own culture or the target-language	**Concepts:** Vocabulary related to movies and to movie making, technology negative *tu* commands making and accepting invitations irregular preterit imperfect preterit vs. imperfect past participles as adjectives **Big Ideas:** Entertainment like film and cinema play a valuable role in leisure time, as well as in teaching about a people's culture.	**Essential Questions:** What effects do Hispanics have on the film industry? How do you express your feelings about movies and technology? What do you learn from films? **Learning Targets:** • Extend and accept invitations in role play situations • Accurately use the preterit and imperfect tenses in speech.	**Suggested Formative Assessments** Interactive Word Wall Questioning Journaling Observation of oral discourse **Suggested Summative Assessment** Compare film awards Read and respond to an excerpt from *La casa de los espiritus.* Vocabulary quizzes Oral Presentation Rubrics Self Assessment

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Standards Alignment	Unit Concepts/ Big Ideas	Essential Questions/ Learning Targets	Assessments
cultures. They use language supported by visual cues such as posters, pictures, props, etc. **2.2 Cultural Products** -Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods. **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, mathematical terms and scientific information. **4.1 Language Comparisons** -Students identify and observe tangible products of the culture such as toys, dress, types of dwelling and foods. **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.			

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Curriculum Framework for Visual Arts

School: Delaware Met **Curricular Tool: Teacher Created** **Course: Art Appreciation**

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
Unit One: Creating and Understanding Art **Timeline : 2 weeks**			
1.4E Demonstrate how a single medium or technique can be used to create multiple effects in works of art **1.5E** Compare and contrast the different effects created by various two-dimensional and three-dimensional works of art **1.6E** Identify different media, techniques and processes that are used to create works of art **1.7E** Describe how media and techniques are used to create two-dimensional and three-dimensional works of art **2.1E** Identify the elements of art **2.2E** Select and use the elements of art in works of art **2.3E** Identify the principles of design **2.4E** Analyze the elements of art **2.5E** Evaluate works of art in terms of structure and function **3.2E** Integrate a variety of sources for subject matter, symbols and/ or ideas which best communicate an intended meaning in works of art	Artists create works of art employing both conscious and intuitive thought. Artists make thoughtful choices in creating works of art. Every work of art has a point of view. Form and function may or may not be related one to the other. 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.	**Essential Questions:** 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? To what extent does good design integrate form with function? 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? **Learning Targets:** • Explain how the principles of art are used to organize	**Suggested Formative Assessments:** Participation in a Web Museum Tour Class discussions Teacher observations Sketchbook entries **Suggested Summative Assessments:** Art criticism piece Rubrics Transfer or performance task Creation of functional art piece Creation of colors One point perspective drawings

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
3.3E Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art **3.6E** Analyze how the use of subject matter, symbols and ideas are used in works of art		the elements of art • Identify the elements of art • Identify the difference between fine arts and applied arts • Demonstrate how a design chart can be used to identify the elements and principles in a work of art • Name and describe the three basic ingredients in paint • Describe the four basic printmaking methods • Name and describe the four major techniques use to create sculpture • Identify the four steps in the process of art criticism • Identify and discuss three major aesthetic theories • Identify and discuss the four steps in the process of art history • Use the four steps of the art history operations to gather information about a work of art	

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
Unit Two: Art of Early Civilizations **Timeline: 2 weeks**			
2.1E Identify the elements of art **2.3E** Identify the principles of design **2.4E** Analyze the elements of art **2.5E** Evaluate works of art in terms of structure and function **2.6E** Analyze the principles of design **2.10E** Analyze how the elements of art and principles of design applied through various media, techniques and processes produce different effects **3.1E** Identify subject matter, symbols and ideas in works of art **3.2E** Integrate a variety of sources for subject matter, symbols and/ or ideas which best communicate an intended meaning in works of art **3.3E** Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art **3.5E** Describe and differentiate the origins of specific subject matter, symbols and ideas in works of art **3.6E** Analyze how the use of subject matter, symbols and ideas are used in works of art **4.1E** Identify historical and cultural characteristics of works of art	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. 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.	**Essential Questions:** How and why is art used as a vehicle for communication? What makes art more or less authentic? To what extent does history reflect upon and have an influence on art? To what extent does art reflect upon and have an influence on history? What makes some works of art great? When does a work of art have merit? 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? **Learning Targets:** Identify and discuss the four steps in the process of art history Use the four steps of the art history operations to gather information about a work of art	**Suggested Formative Assessments:** Participation in a Web Museum Tour Class discussions Teacher observations Sketchbook entries Artifact study **Suggested Summative Assessments:** Art criticism piece Rubrics Transfer or performance task Creation of clay art piece that incorporates geometric principles

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
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 **5.4E** 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	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.	Explain why prehistoric cave paintings may have originated Explain how prehistoric paintings survived. Name the different civilizations that were born, flourished, and declined in Mesopotamia beginning around 4500_{BC} Name the three major historical periods of ancient Egypt Explain the relationship of religion to the development of the pyramids Discuss the uses of sculpture, relief sculpture, and painting in ancient Egypt Explain the strict set of rules imposed on Egyptian artists	
Unit Three: Art of Rising Civilizations **Timeline: 2 weeks**			
2.4E Analyze the elements of art **2.5E** Evaluate works of art in terms of structure and function **3.1E** Identify subject matter, symbols and ideas in	Art is a form of expression that employs a system of visual symbols. Art may be created solely to fulfill a need to create.	**Essential Questions:** How and why is art used as a vehicle for communication? What makes art more or less authentic?	**Suggested Formative Assessments:** Web Museum Tour Class discussions Teacher observations Sketchbook entries Artifact study

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
works of art **3.3E** Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art **3.6E** Analyze how the use of subject matter, symbols and ideas are used in works of art **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	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. 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 process of creating art	To what extent does history reflect upon and have an influence on art? To what extent does art reflect upon and have an influence on history? What makes some works of art great? When does a work of art have merit? 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? How is learning deepened through a study of visual art? In what ways do the learning processes occurring in visual art differ from the learning processes in other disciplines? **Learning Targets:** Describe the three orders of decorative style that originated in Greece Identify the contributions of the ancient Greeks to the history of art Explain how Greek sculpture	**Suggested Summative Assessments:** Art analysis piece Rubrics Transfer or performance task Compare and contrast paper on differences in Greek and Roman Sculpture.

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
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	requires critical and creative problem solving. The means to create art always changes.	changed over time from the Archaic period, through the Classical period, to the Hellenistic period Discuss the contributions of Myron, Phidias, and Polyclitus to Greek sculpture Name the ways in which Roman artists improve on earlier building processes Describe a Roman bath and explain why this kind of structure was so important to the Romans Describe the characteristics of Roman public buildings	
Unit Four: Art Of Asia, The Americas, And Africa **Timeline: 2 weeks**			
3.1E Identify subject matter, symbols and ideas in works of art **3.3E** Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art	Art is a form of expression that employs a system of visual symbols. Art may be created solely to fulfill a need to create.	**Essential Questions:** How is learning deepened through a study of visual art? In what ways do the learning processes occurring in visual art differ from the learning	**Suggested Formative Assessments:** Web Museum Tour Class discussions Teacher observations Sketchbook entries Artifact study

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
3.6E Analyze how the use of subject matter, symbols and ideas are used in works of art **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 **5.5E** Evaluate the artist's intent and effectiveness in communicating ideas and emotions in works of art **5.7E** Describe how a work of art can convey a	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. 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 process of creating art requires critical and creative	processes in other disciplines? What makes art more or less authentic? To what extent does history reflect upon and have an influence on art? To what extent does art reflect upon and have an influence on history? What makes some works of art great? When does a work of art have merit? 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? **Learning Targets:** • Explain how the Hindu and Buddhist religions influenced the architecture and sculpture of India • Identify major Chinese dynasties and discuss the important artworks produced during each • Trace the influences on Japanese art • Identify specific Japanese art styles	**Suggested Summative Assessments:** Art analysis piece Rubrics Transfer or performance task Create a negative shape painting Artist study

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
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	problem solving. The means to create art always changes.	• Identify the contributions to art made by the Native American cultures in the Artic, Northwest Coast, Southwest, Great Plains, and Woodland regions • Discuss the influence of geography and beliefs on the artworks created by those Native American cultures • Identify the contributions to art made by the Olmec, the Maya, the Aztecs, and the Incas • Identify important features in the art and architecture of the Empire of Mali • Name and describe the different types of figures created by African artists, and explain their functions • Identify the medium and the technique used in the production of most African sculpture • Discuss the purposes of African masks	
Unit Five: Art in Quest Of Salvation **Timeline: 2 weeks**			
1.3E Use media and tools in a safe and responsible manner **2.5E** Evaluate works of art in terms of structure and function **3.1E** Identify subject matter, symbols and ideas in	Artists consider multiple approaches to visual problems. Artists create works of art employing both conscious and intuitive thought.	**Essential Questions:** 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?	**Suggested Formative Assessments:** Web Museum Tour Class discussions Teacher observations Sketchbook entries Artifact study

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
works of art **3.3E** Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art **3.6E** Analyze how the use of subject matter, symbols and ideas are used in works of art **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	Artists make thoughtful choices in creating works of art. Form and function may or may not be related one to the other. 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 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. 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 process of creating art	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? To what extent does history reflect upon and have an influence on art? To what extent does art reflect upon and have an influence on history? What makes some works of art great? When does a work of art have merit? 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? How is learning deepened through a study of visual art? **Learning Targets:** Explain how early Christians	**Suggested Summative Assessments:** Art analysis piece Rubrics Transfer or performance task Create a negative shape painting Artist study 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. Create a line drawing of a symmetrical gothic building or church in pen and ink.

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
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	requires critical and creative problem solving. The means to create art always changes.	used art to express their religious beliefs **<u>Learning Targets:</u>** • Discuss the influence of Islam on the art of the Fertile Crescent and Moorish Spain • Explain the importance of book illustrations in Islamic art • Identify the three periods of the Middle Ages and identify art pieces from each. • Discuss the importance of monasticism and the contributions of monks to the art and architecture of the Early Medieval period • Discuss the effects of feudalism on Romanesque architecture • Describe the structural changes made in churches during the Romanesque period • Describe the main features of Gothic architecture • Explain how the sculptures on Gothic cathedrals differed from sculptures on Romanesque churches • Discuss the effects of feudalism on Romanesque architecture • Describe the structural	

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
		changes made in churches during the Romanesque period • Describe the main features of Gothic architecture • Explain how the sculptures on Gothic cathedrals differed from sculptures on Romanesque churches • Analyze how linear perspective and aerial perspective are used to create depth and space	
Unit Six: Art of An Emerging Modern Europe **Timeline: 2 weeks**			
2.5E Evaluate works of art in terms of structure and function **2.6E** Analyze the principles of design **2.7E** Select and use the principles of design in works of art **2.8E** Select and apply the knowledge of the elements of art and principles of design to convey ideas in works of art **2.9E** Plan, design and execute multiple solutions to challenging visual arts problems **2.10E** Analyze how the elements of art and principles of design applied through various media, techniques and processes produce different effects **3.1E** Identify subject matter, symbols and ideas in works of art	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. Art has been created by all peoples, in all times and in all places.	**Essential Questions:** How is learning deepened through a study of visual art? In what ways do the learning processes occurring in visual art differ from the learning processes in other disciplines? What makes art more or less authentic? To what extent does history reflect upon and have an influence on art? To what extent does art reflect upon and have an influence on history? **Learning Targets:** • Explain the impact of the	**Suggested Formative Assessment:** Web Museum Tour Class discussions Teacher observations Sketchbook entries Artifact study 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. **Suggested Summative Assessments:** Art analysis piece Rubrics Transfer or performance task Create a negative shape painting Artist study

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
3.2E Integrate a variety of sources for subject matter, symbols and/ or ideas which best communicate an intended meaning in works of art **3.3E** Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art **3.4E** Select and use subject matter, symbols and ideas to communicate meaning in works of art **3.6E** Analyze how the use of subject matter, symbols and ideas are used in 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 **5.7E** Describe how a work of art can convey a voice of one or a voice of many	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.	printing press on the period • Identify the ideas of the Renaissance and their influence on art and artists • Identify the artists of the High Renaissance and describe their contributions • Discuss the precision and color that mark the works of Jan van Eyck • Explain what Mannerism is and why it developed • Identify mannerist characteristics in the works of Parmigianino, Tintoretto, and El Greco • Identify the most common subject of Spanish paintings during the seventeenth century • Identify the difference between Baroque and Rococo art	
Unit Seven: Art of the Modern Era **Timeline: 2 weeks**			
2.3E Identify the principles of design **2.4E** Analyze the elements of art **2.5E** Evaluate works of art in terms of structure and function	Artists create works of art employing both conscious and intuitive thought. Artists make thoughtful choices in creating works of	How is learning deepened through a study of visual art? In what ways do the learning processes occurring in visual art differ from the learning	**Suggested Formative Assessment:** Web Museum Tour Class discussions Teacher observations Sketchbook entries Artifact study

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
2.6E Analyze the principles of design **2.7E** Select and use the principles of design in works of art **2.8E** Select and apply the knowledge of the elements of art and principles of design to convey ideas in works of art **2.9E** Plan, design and execute multiple solutions to challenging visual arts problems **2.10E** Analyze how the elements of art and principles of design applied through various media, techniques and processes produce different effects **3.1E** Identify subject matter, symbols and ideas in works of art **3.2E** Integrate a variety of sources for subject matter, symbols and/ or ideas which best communicate an intended meaning in works of art **3.3E** Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art **3.4E** Select and use subject matter, symbols and ideas to communicate meaning in works of art **3.6E** Analyze how the use of subject matter, symbols and ideas are used in works of art **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	art. Every work of art has a point of view. Form and function may or may not be related one to the other. 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.	processes in other disciplines? What makes art more or less authentic? To what extent does history reflect upon and have an influence on art? **Learning Targets:** • 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 • Identify the two major English landscape painters of the period and compare their works • Define Realism and identify some artists associated with this style of painting • Identify the objectives of the Impressionists and describe the painting techniques they developed to achieve those objectives • Identify major Impressionist painters and describe some of their works • Describe the sculptures of Auguste Rodin and explain his relationship to the	**Suggested Summative Assessments:** Art analysis piece Rubrics Transfer or performance task Create a negative shape painting Artist study Create a pointillism painting 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. design a mural for the school that makes a strong visual statement about the larger community.

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
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		Impressionists • Define and explain Post-Impressionism • Describe the painting styles of Paul Cezanne, Vincent van Gogh, and Paul Gauguin • Identify two of the first Realists in American painting, and describe their styles • Explain the style and objectives of the Fauves and identify two artists associated with this movement • Discuss the objectives of the Expressionists and names some of the artists associated with this art movement • Define nonobjective art • Describe the ideas underlying Cubism and identify artists associated with this style • Identify trends in architecture since the middle of the twentieth century • Describe Postmodern architecture and identify important Postmodern architects • Discuss the impact of technology on contemporary art	

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
Unit Eight: The Golden Mean to an End (DOE Model Unit) **Timeline: 2 weeks**			
1.1E Select and use different media, techniques and processes that are used to create works of art **1.2E** Use selected two-dimensional and three-dimensional media to communicate ideas **2.3E** Identify the principles of design **2.5E** Evaluate works of art in terms of structure and function **2.6E** Analyze the principles of design **2.7E** Select and use the principles of design in works of art **2.9E** Plan, design and execute multiple solutions to challenging visual arts problems **3.2E** Integrate a variety of sources for subject matter, symbols and/ or ideas which best communicate an intended meaning in works of art **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	Design is inherent in nature. 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.	**Essential Questions:** 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? **Learning Targets:** • 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.	**Suggested Formative Assessments:** Class discussions Teacher observations Artistic process—teacher observation of technique, work habits, and procedures. Thumbnail sketches. Class discussion—description on the Golden Ratio found in everyday objects Worksheets on the Greek Golden Face, constructing a Golden Spiral and Golden Rectangle. **Suggested Summative Assessment:** 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. Performance and transfer tasks Rubrics Portfolio reviews Written responses to Web Quest about historical uses of Golden Mean. The Golden Ratio quiz.

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
in society across history and cultures **5.2E** Identify ways the visual arts are used as communication **5.3E** Describe personal responses to selected works of art **6.3E** Describe and/or demonstrate how skills transfer between the visual arts and other disciplines			

Curriculum Framework for Visual Arts

School: ___Delaware Met_____ Curricular Tool: ____Teacher Created___ Course: ___Drawing____

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
Unit One: Introduction to Drawing **Timeline : 6 lessons**			
1.1E Select and use different media, techniques and processes that are used to create works of art **1.3E** Use media and tools in a safe and responsible manner **1.4E** Demonstrate how a single medium or technique can be used to create multiple effects in works of art **1.6 E** Identify different media, techniques and processes that are used to create works of art **2.1E** Identify the elements of art **2.2E** Select and use the elements of art in works of art **2.3E** Identify the principles of design **2.4E** Analyze the elements of art **2.5E** Evaluate works of art in terms of structure and function **3.1E** Identify subject matter, symbols and ideas in works of art **3.6E** Analyze how the use of subject	Artists make thoughtful choices in creating works of art. Artists use a variety of techniques and processes to manipulate media to achieve desired effects. Artists must understand media, techniques and process as tools to communicate. Artists consider multiple approaches to visual problems. Artists create works of art employing both conscious and intuitive thought. Form and function may or may not be related one to the other. 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	**Essential Questions:** Why do artists select one medium over another? To what extent can media be manipulated using a variety of techniques and processes? To what extent does good design integrate form with function? 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? **Learning Targets:** • Identify the elements of art. • Describe the ways artists use the principles of art to organize the elements of art in their drawings. • Analyze how the elements and principles of art are used to achieve unity • Complete a drawing using mixed media	**Suggested Formative Assessment:** Vocabulary Splash Experiments with texture Teacher observation Sketchbook **Suggested Summative Assessment:** 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

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
matter, symbols and ideas are used in works of art	experience. The process of choosing and evaluating subject matter, symbols and ideas may be deliberate or intuitive.	• Create gesture and contour drawings • List the four steps in the art-criticism process • Identify and describe three theories of art • Describe three kinds of aesthetic qualities	
Unit Two: Lines **Timeline: 4 lessons**			
1.1E Select and use different media, techniques and processes that are used to create works of art **1.2E** Use selected two-dimensional and three-dimensional media to communicate ideas **1.4E** Demonstrate how a single medium or technique can be used to create multiple effects in works of art **1.7 E** Describe how media and techniques are used to create two-dimensional and three-dimensional works of art **2.9E** Plan, design and execute multiple solutions to challenging visual arts problems **5.4E** Analyze works of art to speculate why they were created	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 Perspective Movement Contrast	**Essential Questions:** 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? **Learning Targets:** • Create a line drawing using different types of lines, using charcoal, pencil and black markers. • Create a piece consisting of contrast, movement and rhythm.	**Suggested Formative Assessment:** Teacher observation Participation in class discussion Sketchbook entries **Suggested Summative Assessment:** Performance task Rubrics Vocabulary work

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
		• 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.	
Unit Three: Imitational **Timeline: 8 lessons**			
2.1E Identify the elements of art **2.2E** Select and use the elements of art in works of art **2.3E** Identify the principles of design **2.4E** Analyze the elements of art **2.6E** Analyze the principles of design **2.7E** Select and use the principles of design in works of art **2.8E** Select and apply the knowledge of the elements of art and principles of design to convey ideas in works of art **2.10E** Analyze how the elements of art and principles of design applied through various media, techniques and processes produce different effects	Art is a form of expression that employs a system of visual symbols. Artists make thoughtful choices in creating works of art. Artists use a variety of techniques and processes to manipulate media to achieve desired effects. Artists must understand media, techniques and process as tools to communicate. Artists learn rules in order to break them. Artists consider multiple approaches to visual problems. Artists create works of art employing both conscious and	**Essential Questions:** Why do artists select one medium over another? To what extent can media be manipulated using a variety of techniques and processes? What makes some works of art great? When does a work of art have merit? 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? How and why is art used as a vehicle for communication? **Learning Targets:** • Explain how an imitationalist	**Suggested Formative Assessment:** Vocabulary Splash Experiments with texture Teacher observation Sketchbook Students judge drawing based on their literal qualities, and give reasons for their judgment. **Suggested Summative Assessment:** 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

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
3.1E Identify subject matter, symbols and ideas in works of art **3.2E** Integrate a variety of sources for subject matter, symbols and/ or ideas which best communicate an intended meaning in works of art **3.3E** Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art **3.5E** Describe and differentiate the origins of specific subject matter, symbols and ideas in works of art **5.1E** Discuss how individual experiences influence personal works of art **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	intuitive thought.	judges drawings • Describe the literal qualities in drawings • Understand and demonstrate the use of proportion, negative space, shadows, and perspective in imitational drawings • Identify the basic structural proportions of the head and facial features	

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
Unit Four: Formal Drawings **Timeline: 8 lessons**			
1.1E Select and use different media, techniques and processes that are used to create works of art **1.2E** Use selected two-dimensional and three-dimensional media to communicate ideas **1.3E** Use media and tools in a safe and responsible manner **1.4E** Demonstrate how a single medium or technique can be used to create multiple effects in works of art **1.5E** Compare and contrast the different effects created by various two-dimensional and three-dimensional works of art **1.6 E** Identify different media, techniques and processes that are used to create works of art **2.1E** Identify the elements of art **2.2E** Select and use the elements of art in works of art **2.3E** Identify the principles of design **2.4E** Analyze the elements of art **2.5E** Evaluate works of art in terms of structure and function	Artists make thoughtful choices in creating works of art. Artists use a variety of techniques and processes to manipulate media to achieve desired effects. Artists must understand media, techniques and process as tools to communicate. Artists learn rules in order to break them. Artists consider multiple approaches to visual problems. Artists create works of art employing both conscious and intuitive thought Every work of art has a point of view. Form and function may or may not be related one to the other. Art is a form of expression that employs a system of visual symbols. Reflection, assessment and refinement are key steps in the process of creating art.	**Essential Questions:** Why do artists select one medium over another? To what extent can media be manipulated using a variety of techniques and processes? 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? To what extent does good design integrate form with function? What makes some works of art great? When does a work of art have merit? 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? **Learning Targets** • Identify and describe design qualities in drawings • Use the art elements of shape and	**Suggested Formative Assessment:** Vocabulary Splash Experiments with texture Teacher observation Sketchbook Students judge drawing based on their design qualities and give reasons for judgment Peer critique protocols **Suggested Summative Assessment:** 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

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
2.6E Analyze the principles of design **2.7E** Select and use the principles of design in works of art **2.8E** Select and apply the knowledge of the elements of art and principles of design to convey ideas in works of art **2.9E** Plan, design and execute multiple solutions to challenging visual arts problems **2.10E** Analyze how the elements of art and principles of design applied through various media, techniques and processes produce different effects **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		texture effectively.	

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
5.7E Describe how a work of art can convey a voice of one or a voice of many			
Unit Five: Emotional Drawings **Timeline: 8 lessons**			
2.1E Identify the elements of art **2.2E** Select and use the elements of art in works of art **2.3E** Identify the principles of design **2.4E** Analyze the elements of art **2.5E** Evaluate works of art in terms of structure and function **2.6E** Analyze the principles of design **2.7E** Select and use the principles of design in works of art **2.8E** Select and apply the knowledge of the elements of art and principles of design to convey ideas in works of art **2.9E** Plan, design and execute multiple solutions to challenging visual arts problems **2.10E** Analyze how the elements of art and principles of design applied through various media, techniques and processes	Every work of art has a point of view. Form and function may or may not be related one to the other. 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. Reflection, assessment and refinement are key steps in the process of creating art.	**Essential Questions:** To what extent is a work of art dependent upon the point of view of the viewer? 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? How and why is art used as a vehicle for communication? What makes some works of art great? When does a work of art have merit? 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? **Learning Targets:** • Interpret the feelings, moods, and ideas express by artists in drawings	**Suggested Formative Assessment:** Vocabulary Splash Experiments with texture Teacher observation Sketchbook Students judge drawings based on their expressive qualities and give reasons for judgment **Suggested Summative Assessment:** 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

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
produce different effects **3.1E** Identify subject matter, symbols and ideas in works of art **3.2E** Integrate a variety of sources for subject matter, symbols and/ or ideas which best communicate an intended meaning in works of art **3.3E** Evaluate the sources for content to validate the manner in which subject matter, symbols and ideas are used in works of art **3.4E** Select and use subject matter, symbols and ideas to communicate meaning in works of art **3.6E** Analyze how the use of subject matter, symbols and ideas are used in works of art **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		• Communicate ideas and emotions in abstract and realistic drawings • Express humor in drawings • Create illustrations that express ideas and emotions • Produce mixed media artworks that express ideas and emotions	

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
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			
Unit Six: It Ain't Heavy, It's My Baggage (Model Unit) **Timeline: 8 lessons**			
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	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.	**Essential Questions:** To what extent does history reflect upon and have an influence on art? To what extent does art reflect upon and have an influence on history? What makes some works of art great? When does a work of art have merit? 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? How is learning deepened through a study of visual art? In what ways do the learning processes occurring in visual art differ from the learning processes in other disciplines? Why study art history? **Learning Targets:** Identify the steps of art history	**Suggested Formative Assessment:** Vocabulary Splash Experiments with texture Teacher observation Sketchbook Critique protocol **Suggested Summative Assessment:** 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

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
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		Describe characteristics of several styles and periods of art	

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
Unit Seven: Special Topics in Drawings **Timeline: 8 lessons**			
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	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.	**Essential Questions:** To what extent does history reflect upon and have an influence on art? To what extent does art reflect upon and have an influence on history? What makes some works of art great? When does a work of art have merit? 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? How is learning deepened through a study of visual art? In what ways do the learning processes occurring in visual art differ from the learning processes in other disciplines? Why study art history? **Learning Targets:** Identify the steps of art history Describe characteristics of several styles and periods of art	**Suggested Formative Assessment:** Vocabulary Splash Experiments with texture Teacher observation Sketchbook **Suggested Summative Assessment:** 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

Standards Alignment	Unit Concept/ Big Ideas	Essential Questions/ Learning Targets	Assessments
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			

Curriculum Framework for Performing Arts

School: ___Delaware Met___ Curricular Tool: __Teacher Created___ Course: Introduction to Music

Standards Alignment	Unit Concepts	Essential Questions Student Learning Targets	Assessments
Unit One: Melody **Timeline : 2 weeks**			
1.1E- Imitate melodic patterns **1.7E** -Sing call and response **5.1E** - Identify and define standard notation symbols **5.21E**- Identify and define standard notation symbols **5.3E** - Identify and define standard notation symbols **5.4E-** Read a single line of an instrumental or vocal part **5.8E** – Read an instrumental or vocal score **6.7E** - Identify the elements of music within a musical composition **6.9 D/P** - Identify and explain compositional devices and techniques used in a musical work	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. In order to engage in an ensemble one must be both a performer and a listener with the ability to react. To become a skilled performer requires persistence. Written music is open to individual interpretation.	**Essential Questions:** How conscious and deliberate is the process of creating good music? When does singing go from mere repetition or imitation to creative and artful performance? To what extent does participation in a vocal ensemble impact the performance of the ensemble? When is music deliberate and when is it spontaneous? **Learning Targets:** • Students will gain an understanding of basic music terminology. • Students will be able to use the singing voice and various classroom instruments to facilitate their understanding of melody.	**Suggested Formative Assessment** Teacher observations Presentations Homework Vocabulary work Class discussions **Suggested Summative Assessment** Transfer or Performance tasks rubrics quizzes
Unit Two: Rhythm, Harmony and Meter **Timeline: 2 weeks**			
1.1E- Imitate melodic patterns **1.3E** -Sing on pitch in rhythm	In order to engage in an ensemble one must be both a performer and a	**Essential Questions:** When does playing an instrument	**Suggested Formative Assessment**

while applying a steady beat **2.1E** - Imitate rhythmic and melodic patterns on pitched and unpitched instruments **2.2E** - Perform on pitched and unpitched instruments in rhythm while applying a steady beat **2.3E** - Perform rhythm accompaniments by ear **3.1E** - Perform rhythm accompaniments by ear **3.5E** - Improvise rhythmic variations on given melodies **5.2E** – Read rhythmic notation **5.5E** - Notate symbols and terms for meter and rhythm **6.7E** - Identify the elements of music within a musical composition **6.9 D/P** - Identify and explain compositional devices and techniques used in a musical work	listener with the ability to react. To become a skilled performer requires persistent. Different instruments require different physical skill sets. Written music is open to individual interpretation. Improvisation is achieving a balance among technique, listening, understanding, communicating and responding. Improvising as an individual allows complete creative freedom of expression.	move from mere repetition or imitation to creative and artful performance? To what extent does participation in an instrumental ensemble impact the performance of the ensemble? How conscious and deliberate is the process of creating good music? When is music deliberate and when is it most spontaneous? How much in music is inspiration and how much is perspiration? How much in music is technical skill and how much is "magic"? How much do you have to know about song structure and chord progressions to improvise well? When is music deliberate and when is it most spontaneous? To what extent is improvisation a form of communication? **Learning Targets:** • Students will be able to engage in both parts of an ensemble; listener and performer. • Students will gain an understanding of how their participation impacts the total performance. • Students will be able to demonstrate how improvising	Teacher observations Presentations Homework Vocabulary **Suggested Summative Assessment** Performance or Transfer tasks Rubrics quizzes

		within an ensemble allows freedom with guidelines.	
Unit Three: Musical Form, Expression and Instrument Families **Timeline: 3 weeks**			
5.8E - -Read an instrumental or vocal score **6.1E** - Express changes and contrasts in music through movement **6.2 E** - Identify and classify instruments according to family **6.4 E** - Identify and describe basic music forms **6.5 E** - Identify and describe common instrumental and vocal ensembles **6.6 E** - Express through verbal and non-verbal means various styles/genres of music **6.8 D/P** - Analyze form including theme and variation, basic binary, tertiary and rondo forms, and more complex forms **6.9 D/P** - Identify and explain compositional devices and techniques used in a musical work	To become a skilled performer requires persistence. Different instruments require different physical skill sets. Written music is open to individual interpretation. Improvisation is achieving a balance among technique, listening, understanding, communicating and responding. The combinations of tone, texture, design, timbre, rhythm and theme are limited only by one's imagination. Compositions are written with a purpose that may be self-selected or imposed. Compositions are a communication of emotions. Arrangements are based on preexisting compositions. Arranging allows for freedom in format of presentation. Written music is a language that has symbols and rules that enable a musician or performer to maintain accurate communication over time	**Essential Questions:** When does playing an instrument move from mere repetition or imitation to creative and artful performance? How conscious and deliberate is the process of creating good music? How much in music is inspiration and how much is perspiration? How much in music is technical skill and how much is "magic"? How much do you have to know about song structure and chord progressions to improvise well? When is music deliberate and when is it most spontaneous? To what extent is improvisation a form of communication? How rational is the creative process? How can I make a tune or piece my own? When does mere repetition or imitation become creative and artful performance? How essential is written music to the process of composition?	**Suggested Formative Assessment** Teacher observations Presentations Homework Vocabulary **Suggested Summative Assessment** Performance or transfer task Rubrics quizzes

	and distance. Written music is open to individual interpretation	Should music be rearranged that has already been created? Why learn to read and notate music? Why not? When is the best time to learn notation? According to whom? How essential is written music to the process of composition **Learning Targets:** • Students will gain understanding of how persistence is required in order to become a skilled performer. • Students will be able to use different skill sets in order to play different instruments. • Students will be able to demonstrate how personal style impacts music. • Students will be able to use tone, texture, design, timbre, rhythm and theme to create musical compositions. • Students will be able to discuss the emotions communicated through compositions. • Students will be able to describe how music is a language that has symbols and rules.	
Unit Four: Musical Ensembles and Music in Society **Timeline: 3 weeks**			
8.1E-Identify, compare and contrast the roles of creators, performers and consumers in the	In order to engage in an ensemble one must be both a performer and a listener with the ability to react.	**Essential Questions:** When does playing an instrument move from mere repetition or	**Suggested Formative Assessment** Teacher observations

production and presentation of the arts including music **8.2 D/P -**Make connections with other disciplines as they relate to music **8.3 D/P -**Illustrate ways in which the principles and subject matter of other curricular areas are interrelated to music **8.4 D/P -**Compare and contrast terms common between the arts and other curricular areas (e.g., texture, color, form) **8.5 D/P -**Compare and contrast artistic themes across cultures, history and multiple media **9.1 E -**Identify and describe the roles of musicians in various historical periods, cultures, genre and styles **9.2 D/P -**Listen to music from various periods and diverse cultures by genre or style **9.3 D/P -**Describe how elements of music are used in various historical periods, cultures, genres and styles **9.4 D/P -**Identify sources of American music genres; trace the evolution of those genres and well known musicians associated with them **9.5 D/P -**Classify and describe	Improvising as part of an ensemble allows freedom within guidelines. 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. To become a skilled performer requires persistence. Written music is open to individual interpretation. The combinations of tone, texture, design, timbre, rhythm and theme are limited only by one's imagination. Compositions are written with a purpose that may be self-selected or imposed. Compositions are a communication of emotions. Arrangements are based on preexisting compositions. Arranging allows for freedom in format of presentation.	imitation to creative and artful performance? How conscious and deliberate is the process of creating good music? How much in music is inspiration and how much is perspiration? How much in music is technical skill and how much is "magic"? How much do you have to know about song structure and chord progressions to improvise well? When is music deliberate and when is it most spontaneous? To what extent is improvisation a form of communication? How rational is the creative process? How can I make a tune or piece my own? When does mere repetition or imitation become creative and artful performance? How essential is written music to the process of composition? Should music be rearranged that has already been created? Why learn to read and notate music? Why not?	Presentations Homework Vocabulary Class discussions **<u>Suggested Summative Assessment</u>** Performance or transfer tasks rubrics quizzes

distinguishing characteristics of representative music genres and styles from various cultures and historical periods **9.6 D/P -**Identify and explain the characteristics that cause a musical work to be considered culturally, historically and/or geographically significant		When is the best time to learn notation? According to whom? How essential is written music to the process of composition **Learning Targets:** • Students will gain understanding of how persistence is required in order to become a skilled performer. • Students will be able to use different skill sets in order to play different instruments. • Students will be able to demonstrate how personal style impacts music. • Students will be able to use tone, texture, design, timbre, rhythm and theme to create musical compositions.	
Unit Five: Ragtime, Blues and Jazz **Timeline: 3 weeks**			
6.1E - Express changes and contrasts in music through movement **6.4 E** - Identify and describe basic music forms **6.5 E** - Identify and describe common instrumental and vocal ensembles **6.9 D/P** - Identify and explain compositional devices and techniques used in a musical work **7.1E -**Express personal preferences for specific musical	Listening is an active endeavor. Music has its own vocabulary. Vocabulary enables one to communicate. Knowledge of music provides more opportunities to connect with the meaning. Audience participation and reaction are an integral part of the performance. An audience is the central participant	**Essential Questions:** When is sound considered music? How does the concept of quality relate to musical performance? Is the historical context important to listening and/or analyzing music? What influences the development of a personal aesthetic? How influential is the taste of the time, and why? On what basis can music be	**Suggested Formative Assessment** Teacher observations Presentations Homework Vocabulary **Suggested Summative Assessment** Performance or transfer task Rubric quizzes

styles **7.2E -**Identify ways for evaluating compositions and performances **7.3E -**Explain personal music preferences using appropriate terminology **7.4 D/P -**Discuss and evaluate the relationship between music and human emotions **7.5 D/P -**Develop and apply criteria for evaluating compositions and performances **7.6 D/P -**Develop criteria for evaluating the quality and effectiveness of music performances and compositions and apply the criteria in their personal listening and performing **8.5 D/P -**Compare and contrast artistic themes across cultures, history and multiple media **9.1 E -**Identify and describe the roles of musicians in various historical periods, cultures, genre and styles **9.4 D/P -**Identify sources of American music genres; trace the evolution of those genres and well known musicians associated with them **9.5 D/P -**Classify and describe distinguishing characteristics of representative music genres and styles from various cultures and	in a musical performance. The more vocabulary and understanding one has of the idiom the more clearly one can evaluate. The process of evaluation is both subjective and objective. There will be positive and negative aspects to all music based on personal preferences and levels of understanding. The more one knows about music the more opportunities one has to connect with the meaning. Music is mathematical. It is rhythmically based on the subdivisions of time into fractions that must be performed instantaneously. Music is world language. Most of the descriptive terms are in Italian, German or French; and the notation is a highly developed kind of shorthand that uses symbols to represent ideas. Music is a study and reflection of society. Music reflects the environment and times of its creation. Music has aesthetic, kinesthetic and affective characteristics. It requires coordination of fingers, hands, arms, lip, cheek and facial muscles in	compared and contrasted? Why learn the historical context prior to evaluating music? How important has music been in history? To what extent do musicians break down social norms? To what extent is participation in music education an important part of one's comprehensive education? Does art influence life or does life influence art? To what extent have changes in technology influenced music? To what extent do musicians influence society? To what extent does society influence musicians? To what extent does music play a role in culture? To what extent does music influence social change? How can music be used to reflect the similarities and differences among cultures? **<u>Learning Targets:</u>** • Students will be able to actively listen and communicate	

historical periods **9.6 D/P -**Identify and explain the characteristics that cause a musical work to be considered culturally, historically and/or geographically significant	addition to extraordinary control of the diaphragmatic, back, stomach and chest muscles which respond instantly to the sound the ear hears and the mind interprets. Music is art. It allows a human being to integrate many techniques and use them to create emotion. Music is science. It is exact, specific and demands exact acoustics. A conductor's full score is a chart, a graph that indicates frequencies, intensities, volume changes, melody and harmony all at once and with the exact control of time. Music complements other art forms. Music is one form of artistic expression. People communicate about their culture through music. Changes in history cause changes in music. Music as a form of expression becomes part of the history and culture. Cultures utilize their natural resources to produce music. A culture's music reflects its values.	regarding the music. • Students will be able to use the knowledge gained to communicate the meaning of the music. • Students will be able to describe what makes the audience an integral part of any performance. • Students will understand that musical taste is subjective and based on personal preferences. • Students will be able to understand the music's connection to math. • Students will be able to describe how music is a world language. • Students will demonstrate music's connection to art and artistic expression. • Students will be able to describe the cultural impact music has on a society. • Students will be able to discuss how Blues, Ragtime and Jazz became a part of America's musical foundation.	
Unit Six: 19th Century America **Timeline: 2 weeks**			
6.1E - Express changes and contrasts in music through	Listening is an active endeavor.	**Essential Questions:** When is sound considered music?	**Suggested Formative Assessment**

movement **6.4 E** - Identify and describe basic music forms **6.9 D/P** - Identify and explain compositional devices and techniques used in a musical work **8.2D/P -**Make connections with other disciplines as they relate to music **8.3 D/P-**Illustrate ways in which the principles and subject matter of other curricular areas are interrelated to music **8.5 D/P -**Compare and contrast artistic themes across cultures, history and multiple media **9.2 D/P -**Listen to music from various periods and diverse cultures by genre or style **9.3 D/P -**Describe how elements of music are used in various historical periods, cultures, genres and styles **9.4 D/P -**Identify sources of American music genres; trace the evolution of those genres and well known musicians associated with them **9.5 D/P -**Classify and describe distinguishing characteristics of representative music genres and styles from various cultures and historical periods **9.6 D/P -**Identify and explain the characteristics that cause a	Music has its own vocabulary. Vocabulary enables one to communicate. Knowledge of music provides more opportunities to connect with the meaning. Audience participation and reaction are an integral part of the performance. An audience is the central participant in a musical performance. The more vocabulary and understanding one has of the idiom the more clearly one can evaluate. The process of evaluation is both subjective and objective. There will be positive and negative aspects to all music based on personal preferences and levels of understanding. The more one knows about music the more opportunities one has to connect with the meaning. Music is mathematical. It is rhythmically based on the subdivisions of time into fractions that must be performed instantaneously. Music is world language. Most of the descriptive terms are in Italian, German or French; and the notation	Is the historical context important to listening and/or analyzing music? Should you hear a performance to understand or appreciate it? What influences the development of a personal aesthetic? How influential is the taste of the time, and why? Why learn the historical context prior to evaluating music? How important has music been in history? To what extent do musicians break down social norms? To what extent is participation in music education an important part of one's comprehensive education? To what extent does learning in the arts contribute to a student's cognitive ability? Does art influence life or does life influence art? To what extent have changes in technology influenced music? To what extent do musicians influence society? To what extent does society	Teacher observations Presentations Homework Vocabulary **<u>Suggested Summative Assessment</u>** Performance or transfer task Rubrics quizzes

musical work to be considered culturally, historically and/or geographically significant	is a highly developed kind of shorthand that uses symbols to represent ideas. Music is a study and reflection of society. Music reflects the environment and times of its creation. Music has aesthetic, kinesthetic and affective characteristics. It requires coordination of fingers, hands, arms, lip, cheek and facial muscles in addition to extraordinary control of the diaphragmatic, back, stomach and chest muscles which respond instantly to the sound the ear hears and the mind interprets. Music is art. It allows a human being to integrate many techniques and use them to create emotion. Music is science. It is exact, specific and demands exact acoustics. A conductor's full score is a chart, a graph that indicates frequencies, intensities, volume changes, melody and harmony all at once and with the exact control of time. Music complements other art forms. Music is one form of artistic expression. People communicate about their culture through music. Changes in history cause changes in music.	influence musicians? Under what conditions should music be preserved to accurately insure the composer's intentions? To what extent does music play a role in culture? To what extent does music influence social change? On what basis can music be compared and contrasted? To what extent does music affect the world community? How can music be used to reflect the similarities and differences among cultures? **Learning Targets:** • Students will be able to actively listen and communicate regarding the music. • Students will be able to use the knowledge gained to communicate the meaning of the music. • Students will be able to describe what makes the audience an integral part of any performance. • Students will understand that musical taste is subjective and based on personal preferences. • Students will be able to understand the music's connection to math. • Students will be able to describe how music is a world language. • Students will demonstrate	

	Music as a form of expression becomes part of the history and culture. Cultures utilize their natural resources to produce music. A culture's music reflects its values.	music's connection to art and artistic expression. • Students will be able to describe the cultural impact music has on a society. • Students will be able to describe how social change within the United States affected music. • Students will gain an understanding of how geographical regions helped shape the music of 19th century America. • Students will be able to describe how immigrants coming to the United States brought music from their homelands creating a fusion of various musical styles.	
Unit Seven: The Many Voices of Rock **Timeline: 3 weeks**			
6.1E - Express changes and contrasts in music through movement **6.4 E** - Identify and describe basic music forms **6.5 E** - Identify and describe common instrumental and vocal ensembles **6.6 E** - Express through verbal and non-verbal means various styles/genres of music **6.8 D/P** - Analyze form including theme and variation, basic binary, tertiary and rondo forms, and more complex forms	Listening is an active endeavor. Music has its own vocabulary. Vocabulary enables one to communicate. Knowledge of music provides more opportunities to connect with the meaning. Audience participation and reaction are an integral part of the performance. An audience is the central participant in a musical performance.	**Essential Questions:** When is sound considered music? How does the concept of quality relate to musical performance? Should you hear a performance to understand or appreciate it? What influences the development of a personal aesthetic? How influential is the taste of the time, and why? To what extent is dissonant music a product of our undeveloped taste?	**Suggested Formative Assessment** Teacher observations Presentations Homework Vocabulary Class discussions **Suggested Summative Assessment** Performance or transfer task rubrics quizzes

6.9 D/P - Identify and explain compositional devices and techniques used in a musical work **7.1E -**Express personal preferences for specific musical styles **7.2E -**Identify ways for evaluating compositions and performances **7.3E -**Explain personal music preferences using appropriate terminology **7.4 D/P -**Discuss and evaluate the relationship between music and human emotions **7.5 D/P -**Develop and apply criteria for evaluating compositions and performances **7.6 D/P -**Develop criteria for evaluating the quality and effectiveness of music performances and compositions and apply the criteria in their personal listening and performing **8.5 D/P -**Compare and contrast artistic themes across cultures, history and multiple media **9.1 E -**Identify and describe the roles of musicians in various historical periods, cultures, genre and styles **9.6 D/P -**Identify and explain the characteristics that cause a musical work to be considered culturally, historically and/or	The more vocabulary and understanding one has of the idiom the more clearly one can evaluate. The process of evaluation is both subjective and objective. There will be positive and negative aspects to all music based on personal preferences and levels of understanding. The more one knows about music the more opportunities one has to connect with the meaning. Music is mathematical. It is rhythmically based on the subdivisions of time into fractions that must be performed instantaneously. Music is world language. Most of the descriptive terms are in Italian, German or French; and the notation is a highly developed kind of shorthand that uses symbols to represent ideas. Music is a study and reflection of society. Music reflects the environment and times of its creation. Music has aesthetic, kinesthetic and affective characteristics. It requires coordination of fingers, hands, arms, lip, cheek and facial muscles in addition to extraordinary control of the diaphragmatic, back, stomach and chest muscles which respond	On what basis can music be compared and contrasted? What are the advantages and disadvantages of live performance? How important has music been in history? To what extent do musicians break down social norms? Does art influence life or does life influence art? To what extent have changes in technology influenced music? To what extent do musicians influence society? To what extent does society influence musicians? Under what conditions should music be preserved to accurately insure the composer's intentions? To what extent does music play a role in culture? To what extent does music influence social change? On what basis can music be compared and contrasted? To what extent does music affect the world community?	

geographically significant	instantly to the sound the ear hears and the mind interprets. Music is art. It allows a human being to integrate many techniques and use them to create emotion. Music complements other art forms. Music is one form of artistic expression. People communicate about their culture through music. Changes in history cause changes in music. Music as a form of expression becomes part of the history and culture. Cultures utilize their natural resources to produce music. A culture's music reflects its values.	How can music be used to reflect the similarities and differences among cultures? **Learning Targets:** • Students will be able to actively listen and communicate regarding the music. • Students will be able to use the knowledge gained to communicate the meaning of the music. • Students will be able to describe what makes the audience an integral part of any performance. • Students will understand that musical taste is subjective and based on personal preferences. • Students will be able to understand the music's connection to math. • Students will be able to describe how music is a world language. • Students will demonstrate music's connection to art and artistic expression. • Students will be able to describe the cultural impact music has on a society. • Students will describe how rock music became an important part of American culture. • Students will be able to describe the various types of music that combine to create rock music. • Students will be able to describe what the British Invasion was and its contribution to American history.	

Curriculum Framework for Performing Arts

School: Delaware Met **Curricular Tool: N/A** **Course: Music Theory**

Standards Alignment	Unit Concept/Big Ideas	Student Learning Targets	Assessments
Unit One: The Musician's Raw Materials **Timeline : 4 weeks**			
1.1E Imitate melodic patterns **1.2E** Sing on pitch within the appropriate singing range **1.3E** Sing on pitch in rhythm while applying a steady beat **1.4E** Sing demonstrating proper posture and breathing **1.5E** Sing demonstrating proper vocal technique **1.6E** Sing expressively utilizing dynamics and phrasing **1.7E** Sing call and response **1.8E** Singing ostinati with songs **1.9E** Sing in groups in response to gestures of a conductor **1.10E** Sing rounds **1.11E** Sing partner songs **1.12E** Sing music in 2 and 3 parts **1.13E** Sing in groups and blending vocal	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. In order to engage in an ensemble one must be both a performer and a listener with the ability to react. Written music is a language that has symbols and rules that enable a musician or performer to maintain accurate communication over time and distance. Music has its own vocabulary. **UNIT CONCEPTS:** Pitch Intervals Solfege Rehearsing 2-4 part music or varied genres(see REPERTOIRE below) Breathing and Posture Tone Quality	**Essential Questions:** How conscious and deliberate is the process of creating good music? When does singing go from mere repetition or imitation to creative and artful performance? To what extent does participation in a vocal ensemble impact the performance of the ensemble? Why learn to read and notate music? Why not? How essential is written music to the process of composition? When is sound considered music? What is pitch and how does it relate to music? What is Solfege and how is it used in music? What are the essentials of good posture for singing? What are the physical characteristics necessary for good breath support?	**Suggested Formative Assessment:** Observation based assessment Peer assessment Written and verbal responses Self-evaluation. **Suggested Summative Assessment:** Quizzes Rhythmic dictation Performance or transfer task Rubrics Singing assessments on sight-reading in the keys of C, G, and D major with Solfege, using rubric B. Written assessments on music vocabulary and symbols.

timbres **1.14E** Sing a repertoire of songs representing different genres, styles and languages **1.15E** Sing expressively with phrasing, dynamics and stylistic interpretation. **1.16E** Sing music in 4 parts with and without accompaniment **1.17E** Sing a repertoire of choral literature with expression and technical accuracy including songs performed from memory **6.1E** Express changes and contrasts in music through movement **6.3E** Identify and classify voices by range and quality **6.4E** Identify and describe basic music forms **6.6E** Express through verbal and non-verbal means various styles/ genres of music **6.7E** Identify the elements of music within a musical composition **6.8E** Analyze form including theme and variation, basic binary, tertiary and rondo forms, and more complex forms **6.9E** Identify and explain compositional devices and techniques used in a musical work	Intonation Balance/Blend Dynamics Unison vowels. Phrasing and shaping lines. Form	What is an open, relaxed vocal sound? How are balance and blend achieved within a choir? How do dynamics affect the mood of a song? What is good intonation and how do we achieve it? **<u>Learning Targets:</u>** • Students will be able to identify the properties of individual sounds • Students will be able to identify simple rhythms with quarter, half and whole notes • Students will be able to identify the following intervals: unison, octave, and major and minor thirds • Students will be able to sing major scales and intervals using the solfege system. • Students will be able to sight sing simple melodies in the keys studied.	

Unit Two: Combinations of Materials to Create Tonality , Scales, Key Signatures, Intervals, and Triads **Timeline: 4 weeks**			
1.3E Sing on pitch in rhythm while applying a steady beat **1.6E** Sing expressively utilizing dynamics and phrasing **1.12E** Sing music in 2 and 3 parts **1.13E** Sing in groups and blending vocal timbres **1.15E** Sing expressively with phrasing, dynamics and stylistic interpretation. **1.16E** Sing music in 4 parts with and without accompaniment **2.1E** Imitate rhythmic and melodic patterns on pitched and unpitched instruments **2.2E** Perform on pitched and unpitched instruments in rhythm while applying a steady beat **2.3E** Perform rhythm accompaniments by ear **2.4E** Perform tonal accompaniments by ear **2.5E** Perform melodies by ear using a melodic instrument **2.6E** Perform with proper posture and breathing **2.7E** Perform with proper instrument technique	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. The combinations of tone, texture, design, timbre, rhythm and theme are limited only by one's imagination. Written music is a language that has symbols and rules that enable a musician or performer to maintain accurate communication over time and distance. Listening is an active endeavor. Music has its own vocabulary. Vocabulary enables one to communicate. **CONCEPTS:** Solfege Minor Triads Flat Key Signatures Natural Minor Scale Harmonic Minor Scale Melodic Minor Scale Whole tone scale Intervals Rehearsing 2-4 part	**Essential Questions:** How conscious and deliberate is the process of creating good music? When does singing go from mere repetition or imitation to creative and artful performance? To what extent does participation in a vocal ensemble impact the performance of the ensemble? When is music deliberate and when is it spontaneous? Is the historical context important to listening and/or analyzing music? What is pitch and how does it relate to music? How rational is the creative process? How can I make a tune or piece my own? When does mere repetition or imitation become creative and artful performance? How essential is written music to the process of composition? What formula do we use to build a whole tone scale? What is musical articulation and how	**Suggested Formative Assessment:** Observation based assessment Peer assessment Written and verbal responses Self-evaluation **Suggested Summative Assessment:** Quizzes Performance or transfer task Rubrics

2.8E Perform in groups in response to gestures of a conductor **2.9E** Perform an independent part in an ensemble setting **2.10E** Perform music representing diverse genres and styles **2.11E** Perform in groups with blend and balance **2.12E** Perform expressively with phrasing, dynamics and stylistic interpretation **2.13E** Perform a repertoire of instrumental literature with expression and technical accuracy on a pitched or unpitched instrument **5.1E** Identify and define standard notation symbols **5.2E** Read rhythmic notation **5.3E** Read melodic notation **5.4E** Read a single line of an instrumental or vocal part **5.5E** Notate symbols and terms for meter and rhythm **5.6E** Notate symbols for pitch **5.7E** Notate symbols and terms referring to dynamics, tempo and articulation **5.8E** Read an instrumental or vocal score	music(see repertoire below) Continued study of music reading, solfege syllables, scales, and key signatures. Internalizing Pitch Articulation Stage behavior Group and individual responsibilities within a performance Following a Conductor Improvisation Respect	does it affect the music? What do you want the audience to feel when you are performing? How do facial expressions convey the mood of the text? What s the role of the conductor, and what must the singer do to ensure they are following the conductor? How are different sections combined to create musical compositions? **<u>Learning Targets:</u>** Students will understand and be able to identify half steps and whole steps. Students will understand and be able to sing major and minor scales on solfege. Students will be able to identify all of the Flat key signatures Students will be able to identify rhythms with quarter, eighth and sixteenth notes Students will understand and identify the following intervals: fourths, fifths, and the tritone Students will be able to sing major and minor scales and intervals using the solfege system. Students will be able to identify (aurally) natural, harmonic, and	

5.9E Read unfamiliar music with tonal and rhythmic accuracy **5.10E** Read simple melodies in 2 or more clefs **7.1E** Express personal preferences for specific musical styles **7.3E** Explain personal music preferences using appropriate terminology		**Learning Targets:** • Students will be able to identify (aurally) minor intervals. • Students will be able to identify (aurally) major, minor, augmented,and diminished triads. • Students will be able to notate melodies in a minor key in response to melodic dictation. • Students will be able to distinguish between minor and major tonalities. • Students will be able to sight sing a minor scale using solfege. • Students will be able to sight sing simple melodies in the keys studied.	
Unit Three: Rhythm and Meter **Timeline: 3 weeks**			
2.1E Imitate rhythmic and melodic patterns on pitched and unpitched instruments **2.2E** Perform on pitched and unpitched instruments in rhythm while applying a steady beat **2.3E** Perform rhythm accompaniments by ear **2.4E** Perform tonal accompaniments by ear **2.5E** Perform melodies by ear using a melodic instrument **2.6E** Perform with proper posture and breathing **2.7E** Perform with proper instrument	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. In order to engage in an ensemble one must be both a performer and a listener with the ability to react. To become a skilled performer requires persistence. Written music is open to individual interpretation.	**Essential Questions:** How conscious and deliberate is the process of creating good music? When does singing go from mere repetition or imitation to creative and artful performance? To what extent does participation in a vocal ensemble impact the performance of the ensemble? When is music deliberate and when is it spontaneous? How rational is the creative process? What is the value of creating and observing works of music?	**Suggested Formative Assessment:** Class discussions Teacher observations Exit tickets **Suggested Summative Assessment:** Quizzes Students will compose and perform rhythmic compositions Performance or transfer task Rubrics

technique **2.8E** Perform in groups in response to gestures of a conductor **2.9E** Perform an independent part in an ensemble setting **2.10E** Perform music representing diverse genres and styles **2.11E** Perform in groups with blend and balance **2.12E** Perform expressively with phrasing, dynamics and stylistic interpretation **2.13E** Perform a repertoire of instrumental literature with expression and technical accuracy on a pitched or unpitched instrument **5.2E** Read rhythmic notation **5.3E** Read melodic notation **5.4E** Read a single line of an instrumental or vocal part **5.5E** Notate symbols and terms for meter and rhythm **5.6E** Notate symbols for pitch **5.7E** Notate symbols and terms referring to dynamics, tempo and articulation **5.8E** Read an instrumental or vocal score **5.9E** Read unfamiliar music with tonal and	The combinations of tone, texture, design, timbre, rhythm and theme are limited only by one's imagination. Compositions are written with a purpose that may be self-selected or imposed. Compositions are a communication of emotions. Arrangements are based on preexisting compositions. Arranging allows for freedom in format of presentation. **CONCEPTS** Rhythm Quarter Note Half Note Whole Note Eighth Note Sixteenth Note Meter/Time signature Simple Meters Syncopation Compound Meters Rehearsing 2-4 part music(see REPERTOIRE below) Continued study of music reading, solfege syllables, scales, and key signatures. Music careers Music in our world Consumer awareness Performance goals	How can empathy for another culture be developed by listening to its music? **Learning Targets:** • Students will understand and identify simple duple, triple and quadruple meters • Students will be able to compose rhythmic compositions. • Students will be able to identify (aurally) the meter of a composition	

rhythmic accuracy **5.10E** Read simple melodies in 2 or more clefs **6.1E** Express changes and contrasts in music through movement **6.3E** Identify and classify voices by range and quality **6.4E** Identify and describe basic music forms **6.6E** Express through verbal and non-verbal means various styles/ genres of music **6.7E** Identify the elements of music within a musical composition **6.8E** Analyze form including theme and variation, basic binary, tertiary and rondo forms, and more complex forms **6.9E** Identify and explain compositional devices and techniques used in a musical work	Critique/evaluation Listening Compare/Contrast		
Unit Four: Melody, Harmony, Composition **Timeline: 4 weeks**			
1.1E Imitate melodic patterns **1.16E** Sing music in 4 parts with and without accompaniment **1.17E** Sing a repertoire of choral literature with expression and technical accuracy including songs performed from memory	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. In order to engage in an ensemble one must be both a	How is melody created? Does melody have to be memorable to effectively communicate to an audience? How does melody affect the mood of a composition? Does melody have to be interesting to be meaningful? What is harmony and how does it	**<u>Suggested Formative Assessment:</u>** Create short melodies and analyze them in small groups. Compose short phrases mixed with ostinatos to create smaller works that convey a specific message, idea or mood. Write chords and chord progression that

3.1E Improvise rhythmically with voice or on instrument **3.2E** Improvise ostinato accompaniments **3.3E** Improvise unaccompanied melodies **3.4E** Improvise melodic embellishments on given melodies in various tonalities **3.5E** Improvise rhythmic variations on given melodies **3.6E** Improvise melodic variations **3.7E** Improvise melodies over basic chord progressions **3.8E** Improvise melodies over given rhythm and tonal context **3.9E** Improvise basic harmonic accompaniment or bass line to a given melody **3.10E** Improvise melodies over given rhythm and harmonic context consistent to the styles **4.1E** Compose short songs and instrumental pieces **4.2E** Arrange short songs and/or instrumental pieces **4.3E** Utilize standard written notation in composition of short songs **4.6E** Organize the elements of music into compositions which are unified and varied	performer and a listener with the ability to react. To become a skilled performer requires persistence. Different instruments require different physical skill sets. Arrangements are based on preexisting compositions. Arranging allows for freedom in format of presentation. Compositions are written with a purpose that may be self-selected or imposed. The combinations of tone, texture, design, timbre, rhythm and theme are limited only by one's imagination. Improvising as part of an ensemble allows freedom within guidelines. Improvising as an individual allows complete creative freedom of expression. Improvisation is achieving a balance among technique, listening, understanding, communicating and responding.	enhance a piece of music? How does harmony determine musical style? In what ways does harmony help to communicate a message to a listener? How does harmony support a melodic line? How do composers communicate? What do composers communicate? Why does form exist in music? What is the role of contrast in the compositional process? Why are patterns important in music? How do we accurately sing in Latin? **Learning Targets:** • Students will understand that the main idea of most musical compositions is expressed through the melody. • Students will understand that melodies are organized into tonalities. • Students will understand that music is organized sound. • Students will understand that all music has value even if it differs from an individual's musical preferences. • Students will understand that music contains patterns within a tonal system. Students will understand that music can be composed using tonalities other than major or minor. • Students will understand that chords and chord progressions are the foundation of tonal music.	will late be used for a short composition. Analyze a piece of music looking for melody and harmony. **Suggested Summative Assessment:** Quizzes Singing assessments on sight-reading Transfer or performance tasks rubrics

6.1E Express changes and contrasts in music through movement **6.2E** Identify and classify instruments according to family **6.3E** Identify and classify voices by range and quality **6.4E** Identify and describe basic music forms **6.5E** Identify and describe common instrumental and vocal ensembles **6.6E** Express through verbal and non-verbal means various styles/ genres of music **6.7E** Identify the elements of music within a musical composition **6.8E** Analyze form including theme and variation, basic binary, tertiary and rondo forms, and more complex forms **6.9E** Identify and explain compositional devices and techniques used in a musical work **7.2E** Identify ways for evaluating compositions and performances **7.4E** Discuss and evaluate the relationship between music and human emotions **7.5E** Develop and apply criteria for evaluating compositions and performances	**CONCEPTS** Movement and rest in melody Conjunct and disjunct motion, melodic direction Rhythmic and melodic motives, melodic repetition and sequence Triad arrangements Triads in succession Nonharmonic tones Harmonizing a melody Further harmonizations using I, ii, ii^7, IV, V and V^7 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	• Students will be able to compose melodies in major and minor • tonalities. • Students will be able to compose melodies over a given chord • progression. • Students will be able to write a four part composition. • Students will be able to display knowledge of music terminology when composing music. • Students will be able to evaluate various compositional elements within a piece of music. • Students will be able to respond to recorded music written by various composers • Students will be able to improvise basic rhythms and melodies on unpitched percussion. • Students will be compose simple melodies with chord progressions on piano. • Students will understand that composition is a communication between the composer and the intended audience • Students will understand that patterns are inherent to musical compositions	