

## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS

Pacing Guide			
Content Area: STEAM (Science, Technology, Engineering, Art, and Mathematics)			
Course Title: Gifted and Talented			Grade Level: K-2
	Unit 1: Gifts All Around Me		September-November
	Unit 2: Ben Franklin: A Genius with Many Gifts		December-January
	Unit 3: More Than Just a Face		February-March
	Unit 4: Exploring Culture, Values, and Beliefs through Fairy Tales		April-June

## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS

Unit 1 Overview		
<b>Content Area: STEAM (Science, Technology, Engineering, Art, and Mathematics)</b>		
<b>Unit Title: Gifts All Around Me</b>		
<b>Target Course/Grade Level: K-2</b>		
<p><b>Unit Summary:</b> Students will complete a self-analysis outlining gifts that they possess. They will then choose a modality (technology, art, or other) to communicate what their gift is and how it can help them and others in their life.</p> <p><b>Interdisciplinary connections:</b> Including but not limited to reading, writing, technology, science, social studies, engineering, art, and mathematics</p> <p><b>21<sup>st</sup> century themes:</b> Critical Thinking and Problem Solving; Collaboration, Teamwork, Leadership; Creativity &amp; Innovation; Cross Cultural Understanding &amp; Interpersonal Communication</p> <p><a href="http://www.nj.gov/education/cccs/standards/9/">www.nj.gov/education/cccs/standards/9/</a></p>		
<p><b>Unit Rationale:</b> Every lesson in G and T STEAM is aligned to Common Core State Standards. Provided below is a listing of Mathematical Practices and Literacy in History/Social Studies, Science and Technology standards addressed in a single lesson and its application to STEAM program.</p>		
Learning Targets		
SLO	CCSSMP CCSS.RST.6-8.1-10	Application
1 – Make sense of problems and persevere in solving them.	CCSSMP1	Engage and Persist by learning to develop focus and other ways of thinking helpful to working and persevering at art tasks. Interpret and communicate STEAM information. Engage in inquiry.
2 – Reason abstractly and quantitatively.	CCSSMP2	Stretch and Explore by learning to reach beyond one’s supposed limitations; to embrace the opportunity to learn from mistakes and accidents. Engage in logical reasoning.
3 –Construct viable arguments and critique the reasoning of others.	CCSSMP3	Reflect by learning to think and talk with others about one’s work and the process of making it. Interpret and communicate STEAM information.
4 – Model with mathematics	CCSSMP4	Express by learning to create works that convey an idea, feeling or personal meaning. Integrate STEAM content.
5 – Use appropriate tools strategically.	CCSSMP5	Develop craft by learning to use tools and materials. Apply technology appropriately.
6 – Attend to precision.	CCSSMP6	Observe by learning to attend to visual, audible and written contexts more closely than ordinary “looking” requires. Interpret and communicate STEAM information.
7- Look for and make use of structure.	CCSSMP7	Observe by learning to attend to visual, audible and written contexts more closely than ordinary

## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

**ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS**

		“looking” requires. Learn and apply rigorous STEAM content.
<b>8-</b> Look for and express regularity and repeated reasoning.	<b>CCSSMP8</b>	Express by learning to create works that convey an idea, feeling or personal meaning. Engage in logical reasoning.
<b>Unit Essential Questions</b> <ul style="list-style-type: none"> <li>• How is a gift's value determined?</li> <li>• What constitutes the meaning of a gift?</li> <li>• What can we learn about society's values based on the gifts they preserve?</li> <li>• How can knowledge about gifts contribute to the demands of today's society?</li> </ul>		<b>Unit Enduring Understandings</b> <ul style="list-style-type: none"> <li>• Gifts can be possessed intrinsically or extrinsically.</li> <li>• Gifts have different values among different people.</li> <li>• Gifts can be preserved depending on their value.</li> <li>• Preserved gifts reflect society's values.</li> <li>• Value is often a matter of opinion.</li> </ul>
<b>Unit Learning Targets</b> <i>Students will be able to...</i> <ul style="list-style-type: none"> <li>• Sort and classify ideas about gifts.</li> <li>• Evaluate the contributions of gifts left by leaders of the past.</li> <li>• Brainstorm and analyze gifts valued by the American people (i.e. Star Spangled Banner, freedom, etc.).</li> <li>• Evaluate whether or not historical gifts should be treated differently than a valuable family gift.</li> <li>• Brainstorm a list of talents or gifts people have to offer society.</li> <li>• Write creatively about gift giving situations.</li> <li>• Brainstorm lists of natural resources and then classify them as renewable or non 13 renewable.</li> <li>• Analyze literature and gifts described within the text.</li> <li>• Research a national treasure of their choice and present this information to an audience of their choice</li> </ul>		
<b>Evidence of Learning</b>		
<b>Summative Assessment</b> –student research and presentation at the unit halfway point and at the end. Intent is to provide a summary of student’s acquired skills and educator reflection of programs. <ul style="list-style-type: none"> <li>• Presentation</li> <li>• Teacher generated assessments using curriculum development resources and other advanced level materials.</li> </ul>		

<b>Formative Assessments</b> <ul style="list-style-type: none"> <li>• Teacher created assessments using computer research and other curriculum resources listed.</li> <li>• Pre-assessments – What do you know and</li> </ul>		<ul style="list-style-type: none"> <li>• Research</li> <li>• Graphic Organizers</li> <li>• Teacher Observation</li> </ul>
---	--	---

## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS

what do you want to review from a previous related activity

- Portfolios

- Homework
- Class work (worksheet/activity)

**Equipment Needed:** Folders, computers, internet, pencils, PowerPoint.

**Teacher Resources:**

- <http://americanhistory.si.edu/>
- <https://www.epals.com/>
- <http://www.ascd.org/publications/books/108008/chapters/Describing-theHabits-of-Mind.aspx>
- <http://yourlewisville.dallasnews.com/2014/04/09/liberty-elementary-preservesnational-treasures/>

**Integration of Technology:**

- Smartboard
- Computers
- I-pads
- Internet
- Multi-media Presentations
- Video Streaming

**Curriculum Development Resources**-including, but not limited to the resources available below. Click the links below to access additional resources used to supplement this unit:

- <http://www.corestandards.org>
- <http://www.mtlaurelschools.org/documents/Curriculum/GAP2014-Kto8.pdf>
- [www.yahoo.com](http://www.yahoo.com)
- [www.google.com](http://www.google.com)

## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

**ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS**

Unit 2 Overview		
<b>Content Area: STEAM (Science, Technology, Engineering, Art, and Mathematics)</b>		
<b>Unit Title: Ben Franklin: A Genius with Many Gifts</b>		
<b>Target Course/Grade Level: K-2</b>		
<p><b>Unit Summary:</b> Students will be curators of a new Benjamin Franklin online exhibit and will publish it using a variety of technologies. Students may develop games and displays incorporating significant events, inventions and discoveries of Franklin's.</p> <p><b>Interdisciplinary connections:</b> Including but not limited to reading, writing, technology, science, social studies, engineering, art, and mathematics.</p> <p><b>21<sup>st</sup> century themes:</b> Critical Thinking and Problem Solving; Collaboration, Teamwork, Leadership; Creativity &amp; Innovation; Cross Cultural Understanding &amp; Interpersonal Communication  <a href="http://www.nj.gov/education/cccs/standards/9/">www.nj.gov/education/cccs/standards/9/</a></p>		
<p><b>Unit Rationale:</b> Every lesson in G and T STEAM is aligned to Common Core State Standards. Provided below is a listing of Mathematical Practices and Literacy in History/Social Studies, Science and Technology standards addressed in a single lesson and its application to STEAM program.</p>		
Learning Targets		
SLO	CCSSMP CCSS.RST.6-8.1-10	Application
1 – Make sense of problems and persevere in solving them.	CCSSMP1	Engage and Persist by learning to develop focus and other ways of thinking helpful to working and persevering at art tasks. Interpret and communicate STEAM information. Engage in inquiry.
2 – Reason abstractly and quantitatively.	CCSSMP2	Stretch and Explore by learning to reach beyond one's supposed limitations; to embrace the opportunity to learn from mistakes and accidents. Engage in logical reasoning.
3 –Construct viable arguments and critique the reasoning of others.	CCSSMP3	Reflect by learning to think and talk with others about one's work and the process of making it. Interpret and communicate STEAM information.
4 – Model with mathematics	CCSSMP4	Express by learning to create works that convey an idea, feeling or personal meaning. Integrate STEAM content.
5 – Use appropriate tools strategically.	CCSSMP5	Develop craft by learning to use tools and materials. Apply technology appropriately.
6 – Attend to precision.	CCSSMP6	Observe by learning to attend to visual, audible and written contexts more closely than ordinary "looking" requires. Interpret and communicate STEAM information.
7- Look for and make use of structure.	CCSSMP7	Observe by learning to attend to visual, audible and written contexts more closely than ordinary "looking" requires. Learn and apply rigorous

## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

**ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS**

		STEAM content.
<b>8-</b> Look for and express regularity and repeated reasoning.	<b>CCSSMP8</b>	Express by learning to create works that convey an idea, feeling or personal meaning. Engage in logical reasoning.
<b>Unit Essential Questions</b> <ul style="list-style-type: none"> <li>How did Ben Franklin use his gifts to make a positive impact on the world?</li> <li>How could a person be influenced by life events?</li> <li>What traits of a gifted person did Ben demonstrate?</li> </ul>		<b>Unit Enduring Understandings</b> <ul style="list-style-type: none"> <li>Benjamin Franklin made significant contributions to the world.</li> <li>All people have an opportunity to make a positive impact in the world using their gifts.</li> </ul>
<b>Unit Learning Targets</b> <i>Students will be able to...</i> <ul style="list-style-type: none"> <li>Name important inventions of Franklin's.</li> <li>Identify Franklin's roles (inventor, printer, statesman).</li> <li>Identify Franklin's influence on Philadelphia historically and now.</li> <li>Use outlining techniques.</li> <li>Take notes.</li> <li>Use a timeline to organize Franklin's accomplishments.</li> <li>Participate in a Webquest.</li> <li>Conduct experiments.</li> </ul>		
<b>Evidence of Learning</b>		
<b>Summative Assessment</b> –student research and presentation at the unit halfway point and at the end. Intent is to provide a summary of student's acquired skills and educator reflection of programs. <ul style="list-style-type: none"> <li>Google research and other search engine research</li> <li>Students' exhibits.</li> <li>Teacher generated assessments using curriculum development resources and other advanced level materials.</li> </ul>		

<b>Formative Assessments</b> <ul style="list-style-type: none"> <li>Teacher created assessments using computer research and other curriculum resources listed.</li> <li>Pre-assessments – What do you know and what do you want to review from a previous related activity</li> <li>Portfolios</li> </ul>		<ul style="list-style-type: none"> <li>Research</li> <li>Teacher Observation</li> <li>Graphic Organizers</li> <li>Teacher Observation</li> <li>Homework</li> <li>Class work (worksheet/activity)</li> </ul>
<b>Equipment Needed:</b> Folders, computers, internet, pencils, PowerPoint.		

## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS

### Teacher Resources:

- <http://www.pbs.org/benfranklin/>
- [www.enchantedlearning.com](http://www.enchantedlearning.com)
- <http://www.brighthubeducation.com/history-homework-help/101237-interesting-and-fun-facts-about-ben-franklin/>

### Integration of Technology:

- Smartboard
- Computers
- I-pads
- Internet
- Multi-media Presentations
- Video Streaming
- Calculators
- Software

**Curriculum Development Resources**-including, but not limited to the resources available below. Click the links below to access additional resources used to supplement this unit:

- <http://www.corestandards.org/>
- <http://www.mtlaurelschools.org/documents/Curriculum/GAP2014-Kto8.pdf>
- [www.google.com](http://www.google.com)
- [www.yahoo.com](http://www.yahoo.com)

## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

**ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS**

Unit 3 Overview		
<b>Content Area: STEAM (Science, Technology, Engineering, Art, and Mathematics)</b>		
<b>Unit Title: More Than Just a Face</b>		
<b>Target Course/Grade Level: K-2</b>		
<p><b>Unit Summary:</b> Incorporating all the components of the unit, students will create self-portraits that convey their personality traits in a chosen artistic style. Students will then write about their portrait explaining the reasons for their choices.</p> <p><b>Interdisciplinary connections:</b> Including but not limited to reading, writing, technology, science, social studies, engineering, art, and mathematics.</p> <p><b>21<sup>st</sup> century themes:</b> Critical Thinking and Problem Solving; Collaboration, Teamwork, Leadership; Creativity &amp; Innovation; Cross Cultural Understanding &amp; Interpersonal Communication  <a href="http://www.nj.gov/education/cccs/standards/9/">www.nj.gov/education/cccs/standards/9/</a></p>		
<p><b>Unit Rationale:</b> Every lesson in G and T STEAM is aligned to Common Core State Standards. Provided below is a listing of Mathematical Practices and Literacy in History/Social Studies, Science and Technology standards addressed in a single lesson and its application to STEAM program.</p>		
Learning Targets		
SLO	CCSSMP CCSS.RST.6-8.1-10	Application
1 – Make sense of problems and persevere in solving them.	CCSSMP1	Engage and Persist by learning to develop focus and other ways of thinking helpful to working and persevering at art tasks. Interpret and communicate STEAM information. Engage in inquiry.
2 – Reason abstractly and quantitatively.	CCSSMP2	Stretch and Explore by learning to reach beyond one’s supposed limitations; to embrace the opportunity to learn from mistakes and accidents. Engage in logical reasoning.
3 –Construct viable arguments and critique the reasoning of others.	CCSSMP3	Reflect by learning to think and talk with others about one’s work and the process of making it. Interpret and communicate STEAM information.
4 – Model with mathematics	CCSSMP4	Express by learning to create works that convey an idea, feeling or personal meaning. Integrate STEAM content.
5 – Use appropriate tools strategically.	CCSSMP5	Develop craft by learning to use tools and materials. Apply technology appropriately.
6 – Attend to precision.	CCSSMP6	Observe by learning to attend to visual, audible and written contexts more closely than ordinary “looking” requires. Interpret and communicate STEAM information.
7- Look for and make use of structure.	CCSSMP7	Observe by learning to attend to visual, audible and written contexts more closely than ordinary “looking” requires. Learn and apply rigorous



## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

**ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS**

		STEAM content.
<b>8-</b> Look for and express regularity and repeated reasoning.	<b>CCSSMP8</b>	Express by learning to create works that convey an idea, feeling or personal meaning. Engage in logical reasoning.
<b>Unit Essential Questions</b> <ul style="list-style-type: none"> <li>Do the faces of objects and people always convey what is beneath the surface?</li> <li>How and why do people mask their emotions?</li> </ul>		<b>Unit Enduring Understandings</b> <ul style="list-style-type: none"> <li>Faces of objects and people do not always convey what's beneath the surface.</li> <li>People mask their personality attributes in order to make a good impression on others.</li> <li>People show different "faces" of their personalities depending on the circumstances.</li> </ul>
<b>Unit Learning Targets</b> <i>Students will be able to...</i> <ul style="list-style-type: none"> <li>Identify positive character traits.</li> <li>Identify types of artistic genres.</li> <li>Explain the meanings of idioms.</li> <li>Understand that character traits and/or emotions are often hidden for a variety of reasons.</li> </ul>		
<b>Evidence of Learning</b>		
<b>Summative Assessment</b> –student research and presentation at the unit halfway point and at the end. Intent is to provide a summary of student's acquired skills and educator reflection of programs. <ul style="list-style-type: none"> <li>Google research and other search engine research to complete lesson of choice.</li> <li>Portraits and corresponding writing.</li> <li>Teacher generated assessments using curriculum development resources and other advanced level materials.</li> </ul>		

<b>Formative Assessments</b> <ul style="list-style-type: none"> <li>Teacher created assessments using computer research and other curriculum resources listed.</li> <li>Pre-assessments – What do you know and what do you want to review from a previous related activity</li> <li>Portfolios</li> <li>Rubrics</li> <li>Anecdotal Records</li> <li>Observation</li> <li>Oral Discussions</li> </ul>	
<b>Equipment Needed:</b> Folders, computers, internet, pencils, drawing paper, Microsoft Word, coloring instruments <b>Teacher Resources:</b>	

## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS

- [www.philamuseum.org](http://www.philamuseum.org)
- Feelings- Alik
- Beauty and the Beast- M. Mayer
- Variety of biographies
- Scholastic Dictionary of Idioms- Marvin Terban
- Why the Sun and Moon Live in the Sky- E. Dayrell
- Variety of myths

### Integration of Technology:

- Smartboard
- Computers
- I-pads
- Internet
- Multi-media Presentations
- Video Streaming
- Calculators
- Software

**Curriculum Development Resources**-including, but not limited to the resources available below. Click the links below to access additional resources used to supplement this unit:

- <http://www.corestandards.org/>
- <http://www.mtlaurelschools.org/documents/Curriculum/GAP2014-Kto8.pdf>
- [www.google.com](http://www.google.com)
- [www.yahoo.com](http://www.yahoo.com)

## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

**ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS**

Unit 4 Overview		
<b>Content Area: STEAM (Science, Technology, Engineering, Art, and Mathematics)</b>		
<b>Unit Title: Exploring Culture, Values, and Beliefs through Fairy Tales</b>		
<b>Target Course/Grade Level: K-2</b>		
<p><b>Unit Summary:</b> Using the elements of fairy tales students will create their own fairy tale and publish it using a variety of possible technologies (i.e. voice threads, story boards, Vimeo etc.).</p> <p><b>Interdisciplinary connections:</b> Including but not limited to reading, writing, technology, science, social studies, engineering, art, and mathematics.</p> <p><b>21<sup>st</sup> century themes:</b> Critical Thinking and Problem Solving; Collaboration, Teamwork, Leadership; Creativity &amp; Innovation; Cross Cultural Understanding &amp; Interpersonal Communication  <a href="http://www.nj.gov/education/cccs/standards/9/">www.nj.gov/education/cccs/standards/9/</a></p>		
<p><b>Unit Rationale:</b> Every lesson in G and T STEAM is aligned to Common Core State Standards. Provided below is a listing of Mathematical Practices and Literacy in History/Social Studies, Science and Technology standards addressed in a single lesson and its application to STEAM program.</p>		
Learning Targets		
SLO	CCSSMP CCSS.RST.6-8.1-10	Application
1 – Make sense of problems and persevere in solving them.	CCSSMP1	Engage and Persist by learning to develop focus and other ways of thinking helpful to working and persevering at art tasks. Interpret and communicate STEAM information. Engage in inquiry.
2 – Reason abstractly and quantitatively.	CCSSMP2	Stretch and Explore by learning to reach beyond one’s supposed limitations; to embrace the opportunity to learn from mistakes and accidents. Engage in logical reasoning.
3 –Construct viable arguments and critique the reasoning of others.	CCSSMP3	Reflect by learning to think and talk with others about one’s work and the process of making it. Interpret and communicate STEAM information.
4 – Model with mathematics	CCSSMP4	Express by learning to create works that convey an idea, feeling or personal meaning. Integrate STEAM content.
5 – Use appropriate tools strategically.	CCSSMP5	Develop craft by learning to use tools and materials. Apply technology appropriately.
6 – Attend to precision.	CCSSMP6	Observe by learning to attend to visual, audible and written contexts more closely than ordinary “looking” requires. Interpret and communicate STEAM information.
7- Look for and make use of structure.	CCSSMP7	Observe by learning to attend to visual, audible and written contexts more closely than ordinary “looking” requires. Learn and apply rigorous STEAM content.

## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

**ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS**

<b>8-</b> Look for and express regularity and repeated reasoning.	<b>CCSSMP8</b>	Express by learning to create works that convey an idea, feeling or personal meaning. Engage in logical reasoning.
<b>Unit Essential Questions</b> <ul style="list-style-type: none"> <li>• Why are fairy tales important?</li> <li>• How does genre affect a story?</li> <li>• How and why do stories change over time?</li> <li>• What are common themes in fairy tales?</li> </ul>		<b>Unit Enduring Understandings</b> <ul style="list-style-type: none"> <li>• Fairy Tales reflect the morals and values of a culture.</li> <li>• The genre of a book or story can determine its structure.</li> <li>• Knowledge of a genre can help you understand the author's purpose.</li> <li>• Stories that are passed down over time change.</li> <li>• Common themes run throughout fairy tales.</li> </ul>
<b>Unit Learning Targets</b> <i>Students will be able to...</i> <ul style="list-style-type: none"> <li>• Brainstorm characteristics of fairy tales</li> <li>• Read and view alternate versions of fairy tales</li> <li>• Compare and contrast fairy tales</li> <li>• Read and view fairy tales from multiple perspectives</li> <li>• Read and view fairy tales to determine prejudice and bias</li> <li>• Create an original fairy tale using effective technique, descriptive details, and clear event sequences.</li> <li>• Publish fairy tales using a variety of technologies and multimedia</li> </ul>		
<b>Evidence of Learning</b>		
<b>Summative Assessment</b> –student research and presentation at the unit halfway point and at the end. Intent is to provide a summary of student's acquired skills and educator reflection of programs. <ul style="list-style-type: none"> <li>• Google research and other search engine research to complete lesson of choice.</li> <li>• Presentation</li> <li>• Published Fairy Tale</li> <li>• Teacher generated assessments using curriculum development resources and other advanced level materials.</li> </ul>		

<b>Formative Assessments</b> <ul style="list-style-type: none"> <li>• Teacher created assessments using computer research and other curriculum resources listed.</li> <li>• Pre-assessments – What do you know and what do you want to review from a previous related activity</li> </ul>		<ul style="list-style-type: none"> <li>• Rubrics</li> <li>• Anecdotal Records</li> <li>• Observation</li> <li>• Oral Discussions</li> </ul>
---	--	---

## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS

- Portfolios

**Equipment Needed:** Folders, computers, internet, pencils, PowerPoint, Vimeo

**Teacher Resources:**

- [www.scholastic.com/teachers/lesson-plan/myths-folktales-and-fairy-tales](http://www.scholastic.com/teachers/lesson-plan/myths-folktales-and-fairy-tales)
- <http://www.theaterseatstore.com/ultimate-fairy-tale-resource-guide>
- [http://www.educationworld.com/a\\_lesson/03/lp304-03.shtml](http://www.educationworld.com/a_lesson/03/lp304-03.shtml)

**Integration of Technology:**

- Smartboard
- Computers
- I-pads
- Internet
- Multi-media Presentations
- Video Streaming
- Calculators
- Software

**Curriculum Development Resources**-including, but not limited to the resources available below. Click the links below to access additional resources used to supplement this unit:

- <http://www.corestandards.org/>
- <http://www.mtlaurelschools.org/documents/Curriculum/GAP2014-Kto8.pdf>
- [www.google.com](http://www.google.com)
- [www.yahoo.com](http://www.yahoo.com)

## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS

### ELL Strategies

- Provide explicit, systematic instruction in vocabulary.
- Ensure that ELLs have ample opportunities to talk with both adults and peers and provide ongoing feedback and encouragement.
- Expose ELLs to rich language input.
- Scaffolding for ELLs language learning.
- Encourage continued L1 language development.
- Alphabet knowledge
- Phonological awareness
- Print awareness
- Design instruction that focuses on all of the foundational literacy skills.
- Recognize that many literacy skills can transfer across languages.
- English literacy development by helping ELLs make the connection between what they know in their first language and what they need to know in English.
  - Graphic organizers
  - Modified texts
  - Modified assessments
  - Written/audio instruction
  - Shorter paragraph/essay length
  - Homogeneously grouped by level

## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS

### **MODIFICATIONS**

#### ***Based on Students' Individual Needs***

(Special Education Students, English Language Learners, Students at-Risk)

<b>Time/General</b> <ul style="list-style-type: none"><li>• Allow extra time</li><li>• Repeat and clarify directions</li><li>• Provide breaks in between tasks</li><li>• Have student verbalize directions</li><li>• Provide timelines/due dates for reports and projects</li></ul>	<b>Processing</b> <ul style="list-style-type: none"><li>• Provide extra response time</li><li>• Have student verbalize steps</li><li>• Repeat directions</li><li>• Provide small group instruction</li><li>• Include partner work</li></ul>	<b>Comprehension</b> <ul style="list-style-type: none"><li>• Provide reading material on student's level</li><li>• Have student underline important points</li><li>• Assist student on how to use context clues to identify words/phrases</li><li>• Ensure short manageable tasks</li></ul>
<b>Tests/Quizzes/Grading</b> <ul style="list-style-type: none"><li>• Provide extended time</li><li>• Provide study guides</li><li>• Limit number of responses</li></ul>	<b>Behavior/Attention</b> <ul style="list-style-type: none"><li>• Establish classroom rules</li><li>• Write a contract with the student specifying expected behaviors</li><li>• Provide preferential seating</li><li>• Re-focus student as needed</li><li>• Reinforce student for staying on task</li></ul>	<b>Organization</b> <ul style="list-style-type: none"><li>• Monitor the student and provide reinforcement of directions</li><li>• Verify the accurateness of homework assignments</li><li>• Display a written agenda</li></ul>

## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS

### Enrichment

Accommodate Based on Students Individual Needs: Strategies

- Evaluate vocabulary
- Elevate Text Complexity
- Incorporate inquiry based assignments and projects
- Extend curriculum
- Balance individual, small group and whole group instruction
- Provide tiered/multi-level activities
- Include purposeful learning centers
- Provide open-ended activities and projects
- Offer opportunities for heterogeneous grouping to work with age and social peers as well as homogeneous grouping to provide time to work with individual peers
- Provide pupils with experiences outside the 'regular' curriculum
- Alter the pace the student uses to cover regular curriculum in order to explore topics of interest in greater depth/breadth within their own grade level
- Require a higher quality of work than the norm for the given age group
- Promote higher level of thinking and making connections.
- Focus on process learning skills such as brainstorming, decision making and social skills
- Use supplementary materials in addition to the normal range of resources.
- Encourage peer to peer mentoring
- Integrate cross-curricular lessons
- Incorporate real-world problem solving activities
- Facilitate student-led questioning and discussions



## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS

### Career Ready Practices

#### Standards

#### CRP1, CRP2, CRP3, CRP4, CRP8, CRP9, CRP10, CRP12

- **CRP1. Act as a responsible and contributing citizen and employee.**  
Career-ready individuals understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good.
- **CRP2. Apply appropriate academic and technical skills.**  
Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation
- **CRP3. Attend to personal health and financial well-being.**  
Career-ready individuals understand the relationship between personal health, workplace performance and personal well-being; they act on that understanding to regularly practice healthy diet, exercise and mental health activities. Career-ready individuals also take regular action to contribute to their personal financial wellbeing, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success.
- **CRP4. Communicate clearly and effectively and with reason.**  
Career-ready individuals communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. They communicate in the workplace with clarity and purpose to make maximum use of their own and others' time. They are excellent writers; they master conventions, word choice, and organization, and use effective tone and presentation skills to articulate ideas. They are skilled at interacting with others; they are active listeners and speak clearly and with purpose. Career-ready individuals think about the audience for their communication and prepare accordingly to ensure the desired outcome.
- **CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.**  
Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others.
- **CRP9. Model integrity, ethical leadership and effective management.**  
Career-ready individuals consistently act in ways that align personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in

## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS

every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' action, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture.

- **CRP10. Plan education and career paths aligned to personal goals.** Career-ready individuals take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals.
- **CRP12. Work productively in teams while using cultural global competence.** Career-ready individuals positively contribute to every team, whether formal or informal. They apply an awareness of cultural difference to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings.

## Totowa Mathematics Curriculum Project

Aligned to the NJDOE Model Curriculum

ENGAGING STUDENTS • FOSTERING ACHIEVEMENT • CULTIVATING 21<sup>ST</sup> CENTURY GLOBAL SKILLS

# Educational Technology

## Standards

**8.1.2.A.1, 8.1.2.A.2, 8.1.2.A.3, 8.1.2.A.5, 8.1.2.B.1, 8.1.2.C.1, 8.1.2.D.1, 8.1.2.E.1, 8.1.2.F.1**

- **Technology Operations and Concepts**
  - Identify the basic features of a computer and explain how to use them effectively.
  - Use technology terms in daily practice.
  - Discuss the common uses of computer applications and hardware and identify their advantages and disadvantages.
  - Create a document with text using a word processing program.
  
- **Creativity and Innovation**
  - Illustrate and communicate original ideas and stories using digital tools and media-rich resources.
  
- **Communication and Collaboration**
  - Engage in a variety of developmentally appropriate learning activities with students in other classes, schools, or countries using electronic tools.
  
- **Digital Citizenship**
  - Model legal and ethical behaviors when using both print and non-print information by citing resources.
  
- **Research and Information Literacy**
  - Use digital tools and online resources to explore a problem or issue affecting children, and discuss possible solutions.
  
- **Critical Thinking, Problem Solving, and Decision-Making**
  - Use mapping tools to plan and choose alternate routes to and from various locations.