



# Stafford Township School District

## Gifted and Talented Curriculum Grade 5

Created: 01/07/2015  
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## **Mission Statement**

The mission of the Stafford Township School District is to promote excellence in an environment that engages students in meaningful learning experiences. In partnership with students, dedicated staff, families, and community, the district provides a strong educational foundation that will empower our students to:

- Achieve their unique potential
- Embrace self-directed, lifelong learning
- Develop the skills necessary for appropriate risk-taking and responsible decision-making
- Respect themselves and others
- Problem-solve individually and collaboratively
- Become contributing members of a diverse, global society

## Philosophy

The Stafford Township School District Gifted and Talented program fosters a love of learning. We believe in a program where each student's passion can be explored.

We are committed to a model that values differentiated instruction, one in which classroom teachers work to tailor instruction and content to match student ability level. Our Gifted and Talented program is designed to address the unique social and emotional needs of students by promoting self-understanding, awareness of needs, and cognitive and affective growth.

We hope to inspire and support this special group of learners to embrace challenges and opportunities.

The intent of all levels of Gifted and Talented programming is to honor the "whole child, every child" in developing student competencies that forge lifelong learners and create Global and World changers!

The Stafford Township School District believes that meeting the needs of all students is paramount to providing a thorough and efficient education. Our goal is to empower students to reach their highest potential; physically, academically, emotionally and socially. Students will find the challenge and support needed to help them function in a world that requires:

- Competence in academics and the arts;
- Excellence in communications;
- Adaptability, creativity, and critical thinking;
- Valuing of diversity; and
- Development of character

The New Jersey Student Learning Standards (NJSLs) in ELA, Mathematics, and Next Generation Science Standards (NGSS), are intended to promote higher levels of learning for all students, emphasizing analytical thinking, reasoning, and problem-solving skills. These standards provide a rigorous framework for instruction at each grade level in terms of

content and progression of skills. As gifted and talented students typically grasp curriculum concepts more quickly and deeply than peers their age, they also need additional learning experiences that extend and enrich the standards and require students to apply complex, creative, and innovative thinking to authentic problems.

In order to identify and provide for the many diverse talents of our students, we have developed an enrichment triad model for grades 3-6. This model has been adapted from Joseph Renzulli's Schoolwide Enrichment Program and is based upon the Enrichment Triad Model, which was developed and field tested over a ten year period throughout the United States and Canada (Renzulli, 1990). At the heart of the model is differentiation of instruction. The Enrichment Triad Model is based upon the following four general goals:

- To improve the extent and quality of enrichment for all students and promote excellence throughout the school environment;
- To provide various types and levels of enrichment to a broader spectrum of the school population than usually served in traditional gifted programs;
- To integrate the program within the classroom, with opportunities to enhance learning experiences in a collaborative pull-out setting;
- To minimize concerns about exclusiveness and the negative attitudes that are often expressed toward students participating in only special programs for the gifted.

Interdisciplinary Connections: Language Arts, Math, Science, Social Studies, Technology

<b>Unit 1: Research and Persuasion</b>		<b>Duration:</b> 16 days (September – October)
<b>Standards</b>		
<b>Language Arts Standards</b>		
<b>W.6.1.A-E</b>	Write arguments to support claims with clear reasons and relevant evidence.	
<b>RI.5.1.</b>	Quote accurately from a text and make relevant connections when explaining what the text says explicitly and when drawing inferences from the text.	
<b>RI.6.7</b>	Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.	
<b>SL.5.1.A</b>	Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion.	
<b>SL.5.1.B</b>	Follow agreed-upon rules for discussions and carry out assigned roles.	
<b>SL.5.1.C</b>	Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.	
<b>SL.5.1.D</b>	Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.	
<b>Technology Standards</b>		
<b>8.1.5.A.1</b>	Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.	
<b>21<sup>st</sup> Century Life and Careers</b>		
<p>Century Life and Career Skills: 21st century life and career skills enable students to make informed decisions that prepare them to engage as active citizens in a dynamic global society and to successfully meet the challenges and opportunities of the 21st century global workplace.</p> <p><a href="http://www.state.nj.us/education/aps/cccs/career/">http://www.state.nj.us/education/aps/cccs/career/</a></p>		
<b>9.1 Personal Financial Literacy</b>		
This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.		
<b>9.2 Career Awareness, Exploration, and Preparation</b>		
This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.		
<b>9.3 Career and Technical Education</b>		
This standard outlines what students should know and be able to do upon completion of a CTE Program of Study.		

**Career Ready Practices**

- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
- CRP4. Communicate clearly and effectively and with reason.
- CRP5. Consider the environmental, social and economic impacts of decisions.
- CRP6. Demonstrate creativity and innovation.
- CRP7. Employ valid and reliable research strategies.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP10. Plan education and career paths aligned to personal goals.
- CRP11. Use technology to enhance productivity.
- CRP12. Work productively in teams while using cultural global competence

<b>Essential Understandings</b>	<b>Essential Questions</b>
<p><i>Students will understand that...</i></p> <ul style="list-style-type: none"> <li>● When using various sources for research purposes, it's vital to first establish the validity of the source.</li> <li>● When presenting an opinion, it is vital to incorporate evidence from research.</li> <li>● When presenting a persuasive argument, it's vital to appeal to your audience and know their background.</li> </ul>	<ul style="list-style-type: none"> <li>● Why might information on the internet or other source not be "reliable"?</li> <li>● How do I generate a persuasive argument?</li> <li>● When presenting an opinion/argument, what kind of language is appropriate?</li> <li>● When presenting an argument, how do I generate a call to action?</li> <li>● How can I present my opinions to an audience in a clear and understandable way?</li> </ul>

**Evidence of Student Learning**

<b>Performance Tasks:</b> <i>Activities to provide evidence for student learning of content and cognitive skills.</i>	<b>Other Assessments</b>
<p>Let's Debate! - The students will be given a list of different controversial topics (political, school-wide, community-based, etc.) and select a viewpoint. The students will then be broken up into groups (based on which topic they want to cover) and debate their viewpoint with an opposing group of students. They will need to present their viewpoint, prepare counter-arguments, then come to a compromise. All arguments should be based on facts, research, or data.</p>	<p><b>Formative Assessments</b></p> <ul style="list-style-type: none"> <li>● Graphic Organizers &amp; Guided Note Taking</li> <li>● Sectioned Assessments</li> <li>● Cooperative Group Learning</li> <li>● Homework</li> <li>● Journal Entries</li> </ul> <p><b>Summative Assessments</b></p> <ul style="list-style-type: none"> <li>● Associated Unit tests, quizzes</li> <li>● Presentations</li> </ul>

	<ul style="list-style-type: none"> <li>• Group Debates</li> </ul> <p><b>Benchmark Assessments</b></p> <ul style="list-style-type: none"> <li>• Defined Stem Rubric to assess designed project of choice</li> </ul> <p><b>Alternative Assessments</b></p> <ul style="list-style-type: none"> <li>• Stop &amp; Jot Activities</li> <li>• Student Conversation Rubric</li> <li>• Drawing a Sketch or Picture to Show Comprehension of an Assignment with Verbal Explanation</li> <li>• Teacher Created Projects with Scoring Rubrics</li> <li>• Work Samples</li> <li>• Teacher Observation Checklist</li> </ul>
<b>Knowledge and Skills</b>	
<b>Content</b>	<b>Skills</b>
<p><i>Students will know...</i></p> <ul style="list-style-type: none"> <li>• Web-sources can be misleading accidentally or intentionally.</li> <li>• Opinions/arguments must be supported with evidence/research that is considered true/factual.</li> <li>• Persuasive essays/presentations must have an eye-catching beginning.</li> <li>• When presenting an argument, attention must be given to the opposing viewpoint.</li> <li>• Presentations to an audience must be focused/garnered towards the overall makeup of the audience.</li> </ul>	<p><i>Students will be able to...</i></p> <ul style="list-style-type: none"> <li>• Identify and differentiate between a reliable source from an unreliable source.</li> <li>• Explain the significance of research and evidence in order to gain support for your opinion.</li> <li>• Use research/evidence to generate a persuasive argument.</li> <li>• Write and present a persuasive argument to an audience.</li> <li>• Debate an opinion in front of an audience.</li> </ul>
<b>Instructional Plan</b>	
<b>Suggested Activities</b>	<b>Resources</b>
<p><b>Is My Source WACCC-O?:</b> Students will evaluate websites/resources by identifying specific features necessary to determine validity. The students will be using their knowledge from the unit to complete the activity by first identifying the criteria of a valid source (Web address, Author's name, Content, Copyright date, Citations, and Opinion(?)), then evaluating a website's usability.</p>	<ul style="list-style-type: none"> <li>• Google Survey,8 Videos, 2 Websites, Google Classroom Assignment</li> </ul>

<p><b>Generating an Opinion:</b> Students will formulate opinions on controversial topics, but support them with a personal story/reason. The students will be using their knowledge from the unit to complete the activity by examining a topic and generating three specific reasons why they agree/disagree with the opinion presented.</p>	<ul style="list-style-type: none"> <li>• Google Classroom Assignment</li> </ul>
<p><b>Writing a Persuasive Essay:</b> Students will write an essay stating a personal opinion and giving evidence to support the opinion. The students will be using their knowledge from the unit to complete the activity by starting with a “catchy” introduction, three specific reasons supporting their opinion, and a conclusion that both recognizes the opposing viewpoint and calls the audience to action.</p>	<ul style="list-style-type: none"> <li>• Google Classroom Assignment</li> </ul>
<p><b>Let’s Debate!:</b> Students will take their opinions, then debate a partner/group to argue their points of view. The students will be using their knowledge from the unit to complete the activity by stating their own opinions, listening to opposing opinions, providing counter-arguments for opinions, then presenting a final call to action.</p>	<ul style="list-style-type: none"> <li>• Google Classroom Assignment</li> </ul>
<p><b>Literature</b></p>	
<ul style="list-style-type: none"> <li>• <i>Tips for Better Researching</i> by Louise Spilsbury</li> <li>• <i>Know What to Ask For: Forming Great Research Questions</i> by Emily Johnson and Kristin Fontichiaro</li> <li>• <i>The Curious Researcher</i> by Bruce Ballenger</li> <li>• Self-Selected Reading (Internet)</li> </ul>	
<p><b>Websites</b></p>	
<p><a href="https://allaboutexplorers.com/">https://allaboutexplorers.com/</a></p>	<p>“Fake” pages about various explorers</p>
<p><a href="http://www.enchantedlearning.com/Home.html">www.enchantedlearning.com/Home.html</a></p>	<p>Reference pages to various science/historical topics</p>
<p><a href="http://www.livescience.com/">www.livescience.com/</a></p>	<p>Science articles</p>
<p><a href="http://www.sciencekids.co.nz/sciencefacts/dinosaurs/velociraptor.html">www.sciencekids.co.nz/sciencefacts/dinosaurs/velociraptor.html</a></p>	<p>Facts about Velociraptor for Kids</p>
<p><a href="http://kidsdigdinos.com/dinosaurs/velociraptor.htm">http://kidsdigdinos.com/dinosaurs/velociraptor.htm</a></p>	<p>More facts about Velociraptor for Kids</p>
<p><a href="http://www.youtube.com/watch?v=iFpc35wall8">www.youtube.com/watch?v=iFpc35wall8</a></p>	<p>Video about how Dinosaurs did not live with humans</p>
<p><a href="http://www.youtube.com/watch?v=VS9GB4Jxr28">www.youtube.com/watch?v=VS9GB4Jxr28</a></p>	<p>Video about how Dinosaurs might have lived with humans</p>
<p><a href="http://www.youtube.com/user/sciencestatedclearly">www.youtube.com/user/sciencestatedclearly</a></p>	<p>Collection of Videos about science topics</p>



<a href="http://www.youtube.com/watch?v=m44Rt_YT7Wc">www.youtube.com/watch?v=m44Rt_YT7Wc</a>	Video about Sharks hosted by Discovery
<a href="http://www.youtube.com/watch?v=UOGFCsHiUvc">www.youtube.com/watch?v=UOGFCsHiUvc</a>	Video about Sharks
<a href="http://www.youtube.com/watch?v=GVHduNGEMZI">www.youtube.com/watch?v=GVHduNGEMZI</a>	Video about Velociraptor hosted by Simon Whistler and "Today I Found Out")
<a href="http://www.youtube.com/watch?v=o8P8CVB61CQ&amp;t=27s">www.youtube.com/watch?v=o8P8CVB61CQ&amp;t=27s</a>	Video about Velociraptor Hosted by Tommy H
<a href="http://www.wikipedia.org/">www.wikipedia.org/</a>	Online Encyclopedia - Subject for Debate/Discussion

**Accommodations & Modifications**

**English Language Learners**

- Provide extra time
- Pre-Teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cuing
- Activate schema
- Build background knowledge
- Work toward longer passages as skills in English increase
- Use visuals
- Teacher models reading aloud daily
- Provide peer tutoring
- Use a strong student as a "buddy" (does not necessarily have to speak the primary language)

**Basic Skills**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters

- Prompting and cuing
- Activate schema
- Build background knowledge

### **Economically Disadvantaged**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cuing
- Activate schema
- Build background knowledge

### **Special Education/504 Plans**

- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Use large print books, Braille, or books on CD (digital text)
- Follow all IEP modifications/504 plan

### **Gifted and Talented**

- Higher level questioning
- Students design questions
- Choice board to extend learning
- Expose to sophisticated vocabulary
- Extend reading response to further enrich understanding (see extension activities in unit binder)
- Discuss how readers and writers are connected
- Create comic strip showing connections to reading lives: illustrate and caption
- Create poem using rich adjectives and detailed illustrations
- Write paragraph in notebook about things they are passionate about
- Have students choose someone in their family they would write a biography about and why
- Collect artifacts to decorate notebook at home- discuss with class
- Have students create a poster showing their favorite reading spot

- Have students create anchor charts to explain strategy taught to hang around the room
- Students can expand on discussions with family members in their notebooks
- Expand reading genre while independent reading to reflect a well-rounded book bag
- Complete appendix pages at home with independent reading
- Create an enhanced set of introductory activities (e.g. advance organizers, concept maps, concept puzzles)
- Provide options, alternatives and choices to differentiate and broaden the curriculum •
- Organize and offer flexible small group learning activities
- Teach cognitive and methodological skills
- Use center, stations, or contracts
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

#### **Students at risk of school failure**

- Provide peer tutoring
- Use a strong student as a “buddy”
- Use books on tape
- Allow extra time to complete assignments or tests
- Work in a small group
- One on one instruction
- Provide immediate praise and feedback
- Provide high interest topics
- Create a nurturing environment
- Provide visuals
- Be flexible with assignments and time frames
- Provide needed academic resources

<b>Unit 2: Scientific Inquiry</b>		<b>Duration:</b> 55 days (October – June)
<b>Standards</b>		
<b>Next Generation Science Standards</b>		
<b>3-5-ETS1-1</b>	Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.	
<b>3-5-ETS1-2</b>	Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.	
<b>Math Standards</b>		
<b>6.SP.B.4c</b>	Giving quantitative measure of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data was gathered.	
<b>Language Arts Standards</b>		
<b>SL.5.1.A</b>	Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion.	
<b>SL.5.1.B</b>	Follow agreed-upon rules for discussions and carry out assigned roles.	
<b>SL.5.1.C</b>	Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.	
<b>SL.5.1.D</b>	Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.	
<b>RI.6.7</b>	Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.	
<b>Social Studies Standards</b>		
<b>6.1.8.C.4.c</b>	Analyze how technological innovations affected the status and social class of different groups of people and explain the outcomes that resulted.	
<b>Technology Standards</b>		
<b>8.1.5.A.1</b>	Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.	
<b>21<sup>st</sup> Century Life and Careers</b>		
<p>Century Life and Career Skills: 21st century life and career skills enable students to make informed decisions that prepare them to engage as active citizens in a dynamic global society and to successfully meet the challenges and opportunities of the 21st century global workplace.</p> <p><a href="http://www.state.nj.us/education/aps/cccs/career/">http://www.state.nj.us/education/aps/cccs/career/</a></p>		

### 9.1 Personal Financial Literacy

This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.

### 9.2 Career Awareness, Exploration, and Preparation

This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.

### 9.3 Career and Technical Education

This standard outlines what students should know and be able to do upon completion of a CTE Program of Study.

#### Career Ready Practices

- CRP1. Act as a responsible and contributing citizen and employee.
- CRP2. Apply appropriate academic and technical skills.
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- CRP6. Demonstrate creativity and innovation.
- CRP7. Employ valid and reliable research strategies.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP10. Plan education and career paths aligned to personal goals.
- CRP11. Use technology to enhance productivity.
- CRP12. Work productively in teams while using cultural global competence

#### Essential Understandings

*Students will understand that...*

- Scientific inquiry is used to prove an idea/hypothesis/theory using evidence obtained by research and experiments.
- Scientific inquiry is an ongoing process that can be adjusted and modified as needed as per the task.
- When presenting an experiment/result, it is vital to incorporate evidence from research and tests.

#### Essential Questions

- What constitutes a “well-rounded” question from a simple question?
- What test can I design to prove/disprove an idea or hypothesis based on research?
- How can I interpret the data obtained from my experiment to prove/disprove my hypothesis?
- How can I use my data to prove my answer to a question?
- How can I present my findings to an audience in a clear and understandable way?
- Why is scientific inquiry so important?

<b>Evidence of Student Learning</b>	
<b>Performance Tasks:</b> <i>Activities to provide evidence for student learning of content and cognitive skills.</i>	<b>Other Assessments</b>
<p>Soda &amp; Mentos Eruption Experiment            Do Hats REALLY Cause a Distraction in School? (AKA, Student Distraction Experiment)            Can You Fold A Piece of Paper More Than 7 Times?            Self-Determined Persuasive Presentation            The Duct Tape Campsite</p>	<p><b>Formative Assessments</b></p> <ul style="list-style-type: none"> <li>● Graphic Organizers &amp; Guided Note Taking</li> <li>● Sectioned Assessments</li> <li>● Cooperative Group Learning</li> <li>● Homework</li> <li>● Journal Entries</li> </ul> <p><b>Summative Assessments</b></p> <ul style="list-style-type: none"> <li>● Associated Unit tests, quizzes</li> <li>● Labs and engineering based projects</li> </ul> <p><b>Benchmark Assessments</b></p> <ul style="list-style-type: none"> <li>● Defined Stem Rubric to assess designed project of choice</li> </ul> <p><b>Alternative Assessments</b></p> <ul style="list-style-type: none"> <li>● Stop &amp; Jot Activities</li> <li>● Student Conversation Rubric</li> <li>● Drawing a Sketch or Picture to Show Comprehension of an Assignment with Verbal Explanation</li> <li>● Teacher Created Projects with Scoring Rubrics</li> <li>● Work Samples</li> <li>● Teacher Observation Checklist</li> </ul>
<b>Knowledge and Skills</b>	
<b>Content</b>	<b>Skills</b>
<p><i>Students will know...</i></p> <ul style="list-style-type: none"> <li>● When a Mento is dropped into a bottle of soda, a chemical reaction will occur (nucleation effect).</li> <li>● Every experiment must involve a measurable data point that can be compared to others.</li> <li>● Folding a piece of paper creates an exponential growth effect where the layers of paper are doubled with each fold.</li> </ul>	<p><i>Students will be able to...</i></p> <ul style="list-style-type: none"> <li>● Generate a well-rounded question for the purpose of testing/experimenting.</li> <li>● Identify and differentiate between a reliable source from an unreliable source.</li> <li>● Explain the significance of research and evidence in order to prove a hypothesis/prediction/theory.</li> <li>● Use research/prior knowledge to generate a</li> </ul>

<ul style="list-style-type: none"> <li>• When a soda is carbonated, it creates a pressure vessel whereby when an opening is created, the liquid travels from high pressure to low pressure.</li> <li>• The human brain is split into two systems. System 1 is the automatic part of our brain that takes in stimuli and processes it. System 2 is the voluntary parts of our brains, which process suggestions, offered by System 1, makes final decisions and chooses where to allocate our attention.</li> <li>• There are three types of distractions: manual, visual, and cognitive. Manual is a physical distraction, visual is a distraction that is only seen, and cognitive is thoughts that draw attention away.</li> </ul>	<p>hypothesis/prediction/theory.</p> <ul style="list-style-type: none"> <li>• Design and perform a test/experiment to prove/disprove a hypothesis/theory.</li> <li>• Choose and utilize various tools to acquire data.</li> <li>• Chart/record data onto a graph.</li> <li>• Interpret data collected to prove/modify their theory.</li> <li>• Interpret data collected and research to draw a conclusion/answer to their generated question.</li> <li>• Demonstrate their expertise by presenting their findings to family, friends, teachers, and peers.</li> </ul>
<b>Instructional Plan</b>	
<b>Suggested Activities</b>	<b>Resources</b>
<p><b>Open/Closed Questions:</b> Students will describe the major differences between closed and open questions as well as the steps for developing better questions. The students will be using their knowledge from the unit to complete the activity by developing their own questions about various topics of their choice.</p>	<ul style="list-style-type: none"> <li>• Google Slideshow, Whiteboards/Paper, Markers</li> </ul>
<p><b>Hypothesize: Busted, Plausible, Confirmed:</b> Students will describe how/why to make predictions using a clear writing format. In addition, the students will be able to define the Myth busters terms: Busted, Plausible, and Confirmed and explain the differences between the three terms. The students will be using their knowledge from the unit to complete the activity by writing their own “B/P/C” statements based on various suggestions from the teacher and themselves and incorporate reasons why they made the prediction they did.</p>	<ul style="list-style-type: none"> <li>• Google Classroom Assignment</li> </ul>
<p><b>How Do You Eat A Bag Of Chips?:</b> Students will write a complete procedure for eating a bag of chips, execute their procedures, and explain the successes and failures of them. The students will be using their knowledge from the unit to complete the demonstration by developing procedures for eating chips,</p>	<ul style="list-style-type: none"> <li>• Google Classroom Assignment, Individual Bags of Chips</li> </ul>

then having students try them on each other, and finally evaluating their success.	
<b>Making Observations: What's the Story?:</b> Students will make observations of various objects that “tell a story.” The students will evaluate the observations in an attempt to describe what happened prior to it ending up at their table.	<ul style="list-style-type: none"> <li>• Google Classroom Assignment, Scales, Tape Measures/Rulers, Various Objects (Broken Car Bumper w/ Deer Hair, Overlapping Tree Branch, Triceratops Fossils, etc).</li> </ul>
<b>Data Collection: Surveys:</b> The students will gather some basic data by generating a survey. The students will then evaluate the numbers collected and explain what it means. The students will be using their knowledge from the unit to complete the activity by evaluating the numerical data and describe what can be learned/done with the survey.	<ul style="list-style-type: none"> <li>• Student Generated Survey, Google Classroom Assignment</li> </ul>
<b>Soda And Mentos Eruption Experiment:</b> The students will explore, research, test, and evaluate the eruptions of soda with mentos. They will use the scientific web to determine if Diet Coke, or another soda creates a more vigorous reaction. The students will evaluate the data that they themselves collect to find the answer.	<ul style="list-style-type: none"> <li>• Mythbusters Video, Google Classroom Assignment, Google Survey</li> </ul>
<b>Do Hats REALLY Cause a Distraction in School? (AKA, Student Distraction Experiment):</b> The students will explore, research, test, and evaluate the various distractions that take place in a classroom. The will use the scientific web to determine if hats are as much of a distraction as principals would lead them to believe. They will compare hats to other various distractions such as excessive talking, clicking pens, and music.	<ul style="list-style-type: none"> <li>• Various Websites (Students Locate), Google Classroom Assignment, Google Survey, Hats, Pens, Headsets, Music/Talking Playlist.</li> </ul>
<b>Can You Fold A Piece of Paper More Than 7 Times?:</b> The students will explore, research, test, and evaluate the exponential growth that takes place in folding a piece of paper. They will use the scientific web to determine if it's possible to fold a piece of paper more than seven times. They will also explore the concept as an engineering challenge to come up with a technique or modification of the criteria to complete the challenge.	<ul style="list-style-type: none"> <li>• Mythbusters Video, Various Websites (Students Locate), Google Classroom Assignment, Copy Paper, Construction Paper, Tracing Paper, Poster Board Paper, Toilet Paper, Tissue Paper.</li> </ul>
<b>Self-Determined Persuasive Presentation:</b> The students will explore, research, test, and evaluate self-developed questions and use the scientific web/process to draw conclusions, then	<ul style="list-style-type: none"> <li>• 2 Google Slideshows, 3 Sample Poster board Projects, 1 Student Sample Video, Google Classroom Assignment</li> </ul>



<p>present their evidence in an event to call the audience to action about a particular product/solution. The students will be using their knowledge from the unit to complete the presentation by describing their problem/question, explain the process they took in developing tests and evaluating the results, then presenting a final solution with a call to action from the audience.</p>	
<p><b>The Duct Tape Campsite:</b> The students will evaluate the challenges that come from having a campsite with no other materials besides duct tape. They will explore this as an engineering challenge by constructing a typical camp-related tool/object using nothing but duct tape.</p>	<ul style="list-style-type: none"> <li>• Multiple Rolls of Duct Tape</li> </ul>
<p><b>Literature</b></p>	
<ul style="list-style-type: none"> <li>• <i>Totally Irresponsible Science</i> by Sean Connolly</li> <li>• <i>Mythbusters: The Explosive Truth Behind 30 of the Most Perplexing Urban Legends of All Time</i> by Keith and Ken Zimmerman</li> <li>• <i>Mythbusters: Don't Try This At Home</i> by Mary Packard</li> <li>• <i>Extraordinary Uses For Ordinary Things</i> by Don Earnest</li> <li>• <i>A Kid's Guide to Awesome Duct Tape Projects</i> by Nicole Smith</li> <li>• Self-Selected Reading</li> </ul>	
<p><b>Websites</b></p>	
<p><a href="https://drive.google.com/file/d/0B2STCzeTcQR1Ry1wcnpKNXFYSzq/view">https://drive.google.com/file/d/0B2STCzeTcQR1Ry1wcnpKNXFYSzq/view</a></p>	<p>Mythbusters Video Covering Soda/Mentos Reaction</p>
<p><a href="https://www.youtube.com/watch?v=MsG84J8CUk">https://www.youtube.com/watch?v=MsG84J8CUk</a></p>	<p>Shaking a Soda Can Walkthrough Video</p>
<p><a href="https://www.youtube.com/watch?v=l5xbgNTxApo">https://www.youtube.com/watch?v=l5xbgNTxApo</a></p>	<p>Steve Spangler walks audience through stopping a can of soda from exploding)</p>
<p><a href="https://drive.google.com/drive/folders/0B2STCzeTcQR1YjFPVWV1WkdyclU">https://drive.google.com/drive/folders/0B2STCzeTcQR1YjFPVWV1WkdyclU</a></p>	<p>Mythbusters Video Covering the Folding Paper 7 Times Myth)</p>
<p><a href="https://www.youtube.com/watch?v=PRYYMXH7DUQ">https://www.youtube.com/watch?v=PRYYMXH7DUQ</a></p>	<p>Mythbusters Video Covering the Refrigerated Battery Myth</p>
<p><a href="https://www.wikipedia.org/">https://www.wikipedia.org/</a></p>	<p>Online Encyclopedia - Subject for Debate/Discussion)</p>
<p><b>Accommodations &amp; Modifications</b></p>	

**English Language Learners**

- Provide extra time
- Pre-Teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cuing
- Activate schema
- Build background knowledge
- Work toward longer passages as skills in English increase
- Use visuals
- Teacher models reading aloud daily
- Provide peer tutoring
- Use a strong student as a “buddy” (does not necessarily have to speak the primary language)

**Basic Skills**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons
- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cuing
- Activate schema
- Build background knowledge

**Economically Disadvantaged**

- Pre-teach vocabulary using visuals and gestures
- Chunk texts
- Summarize as you go
- Preview lessons

- Graphic organizers
- Highlight key words
- Sentence starters
- Prompting and cuing
- Activate schema
- Build background knowledge

### **Special Education/504 Plans**

- Allow extra time to complete assignments or tests
- Work in a small group
- Allow answers to be given orally or dictated
- Use large print books, Braille, or books on CD (digital text)
- Follow all IEP modifications/504 plan

### **Gifted and Talented**

- Higher level questioning
- Students design questions
- Choice board to extend learning
- Expose to sophisticated vocabulary
- Extend reading response to further enrich understanding (see extension activities in unit binder)
- Discuss how readers and writers are connected
- Create comic strip showing connections to reading lives: illustrate and caption
- Create poem using rich adjectives and detailed illustrations
- Write paragraph in notebook about things they are passionate about
- Have students choose someone in their family they would write a biography about and why
- Collect artifacts to decorate notebook at home- discuss with class
- Have students create a poster showing their favorite reading spot
- Have students create anchor charts to explain strategy taught to hang around the room
- Students can expand on discussions with family members in their notebooks
- Expand reading genre while independent reading to reflect a well-rounded book bag
- Complete appendix pages at home with independent reading
- Create an enhanced set of introductory activities (e.g. advance organizers, concept maps, concept puzzles)
- Provide options, alternatives and choices to differentiate and broaden the curriculum •
- Organize and offer flexible small group learning activities
- Teach cognitive and methodological skills

- Use center, stations, or contracts
- Organize integrated problem-solving simulations
- Propose interest-based extension activities

**Students at risk of school failure**

- Provide peer tutoring
- Use a strong student as a “buddy”
- Use books on tape
- Allow extra time to complete assignments or tests
- Work in a small group
- One on one instruction
- Provide immediate praise and feedback
- Provide high interest topics
- Create a nurturing environment
- Provide visuals
- Be flexible with assignments and time frames
- Provide needed academic resources

**Stafford Township School District  
Grade 5  
Gifted and Talented Pacing Guide**

<b>Unit 1: Research &amp; Persuasion</b>	<b>September – October 16 Days</b>
<b>Unit 2: Scientific Inquiry</b>	<b>October - June 55 Days</b>