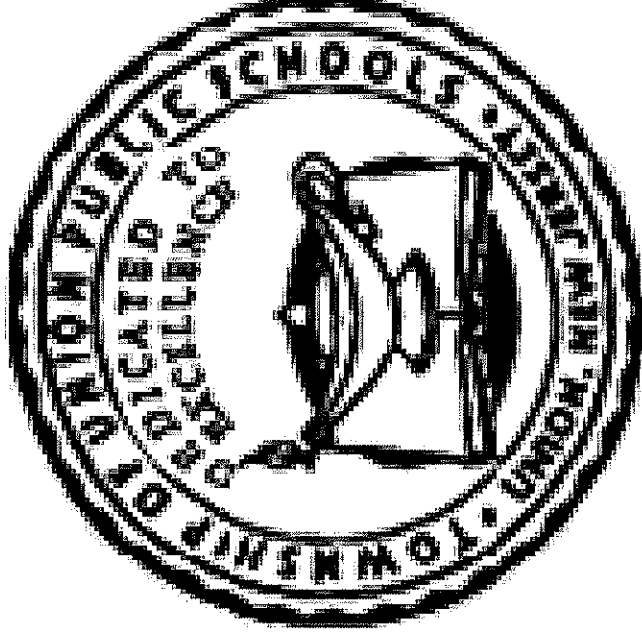


TOWNSHIP OF UNION PUBLIC SCHOOLS



Gifted and Talented – Grades 6-8

Curriculum Guide

September 19, 2017

Mission Statement

The mission of the Township of Union Public Schools is to build on the foundations of honesty, excellence, integrity, strong family, and community partnerships. We promote a supportive learning environment where every student is challenged, inspired, empowered, and respected as diverse learners. Through cultivation of students' intellectual curiosity, skills and knowledge, our students can achieve academically and socially, and contribute as responsible and productive citizens of our global community.

Philosophy Statement

The Township of Union Public School District, as a societal agency, reflects democratic ideals and concepts through its educational practices. It is the belief of the Board of Education that a primary function of the Township of Union Public School System is to formulate a learning climate conducive to the needs of all students in general, providing therein for individual differences. The school operates as a partner with the home and community.

Statement of District Goals

- Develop reading, writing, speaking, listening, and mathematical skills.
- Develop a pride in work and a feeling of self-worth, self-reliance, and self-discipline.
- Acquire and use the skills and habits involved in critical and constructive thinking.
- Develop a code of behavior based on moral and ethical principles.
- Work with others cooperatively.
- Acquire a knowledge and appreciation of the historical record of human achievements and failures, and current societal issues.
- Acquire a knowledge and understanding of Science, Engineering, Mathematics and Technology.
- Participate effectively and efficiently in economic life and develop skills to enter a specific field of work.
- Appreciate and understand literature, art, music, and other cultural activities.
- Develop an understanding of the historical and cultural heritage.
- Develop a concern for the proper use and/or preservation of natural resources.
- Develop basic skills in sports and other forms of recreation.

Course Description

The purpose of the district program for the gifted and talented is to provide appropriate educational services for those students who have been identified as having or possessing exceptional abilities. Through a differentiated curriculum, both in depth and scope, these students will be challenged to maximize their potentials.

The Gifted and Talented program for the gifted students surpasses their assigned grade levels, and places an emphasis on analysis, synthesis and evaluation. The Gifted and Talented program creates opportunities for students to venture “outside of the box”, to see beyond that which is apparent to the average learner, and to be innovative and creative in their thinking. Howard Gardner’s Multiple Intelligences are also incorporated so that gifted students use their preferred intelligence to demonstrate their giftedness. The gifted student possesses the ability to venture “outside of the box” and to see beyond that, which is apparent to the average learner. The G&T program hones students’ exceptional skills and encourages students to reach higher levels of productivity. The emphasis in grades kindergarten through eight will be placed on developing communication, collaboration, creativity, and critical thinking skills.

“In essence, gifted students have a right to educational experiences that meet their needs. In providing for those needs, we address the whole child with a total curriculum that integrates realms of learning within and across planned experiences, that provides for a progressive development of knowledge and skills and that enhances an appreciation of humanity.” (Van-Tassel-Baska, J. (1988), Comprehensive Curriculum for Gifted Learners. Needham Heights, MA: Allyn and Bacon)

Course Proficiencies

Students will be able to...

- Demonstrate high levels of ability, in one or more content areas.
- Develop soft skill set to promote college/workplace readiness.
- Develop collaborative skills to build ideas with fellow students, to enhance their level of innovation in today's constantly changing world.
- Use above-grade-level vocabulary in written and/or oral communications to express their ideas and findings.
- Speak confidently to an audience using effective public-speaking techniques.
- Use technological tools to create and enhance their multi-disciplinary projects.
- Develop effective problem-solving techniques that require above-grade-level logic and reasoning skills.

Middle School Gifted and Talented Curriculum Units

<u>Curriculum Units</u>	STEM	Business	Science	Social Studies	Math	Logic	Writing	Public Speaking
Grade 6	X	X	X			X	X	X
Grade 7	X	X		X	X	X	X	X
Grade 8	X		X	X	X	X	X	

Pacing Guide- Grade 6

<u>Content</u>	<u>Number of Days</u>
Unit 1: STEM/Coding	Sept. – Dec.
Unit 2: Logic/Public Speaking	Jan. – March
Unit 3: Writing	On Going
Unit 4: Science/STEM/Business	April – June

Unit 1: 6th Grade STEM/Coding

Essential Questions	Instructional Objectives/ Skills and Benchmarks (CPIs)	Activities	Assessments
<p>Can you engineer a tower in a fixed time-frame using predefined materials that is taller than those of other gifted students?</p> <p>Can you enhance your tower-building result when partnered with another gifted student?</p>	<p>Students will: Research and refine architectural plans. Implement said plan, to construct towers. Partner, collaborate, redefine, and execute their new plans.</p>	<p>Students will participate in the “Marshmallow Tower to the Stars” competition. Students will individually design and then build a marshmallow tower using specified materials. Students will compete in phase II of the by collaboratively designing and constructing tower II.</p>	<p>Group discussion Class participation Teacher observation Self assessment Results in competition during phase I Results in competition during phase II Rubric for reflection Rubric for Scratch game</p>
<p>Do you understand how coding affects our everyday lives?</p> <p>Can you use code to generate a digital response?</p> <p>Can you edit a website using your knowledge of code?</p>	<p>Compare and contrast benefits of working alone versus working with a partner. Investigate the basics of coding using Scratch and understand how coding is used in today’s world. Practice public speaking as they share online games created in Scratch.</p>	<p>Students will reflect on their experience and utilize available technology to report. Students will use Scratch to develop an online game. Scratch games will be shared at G&T Game-Con.</p>	

Unit 2: 6th Grade Logic/Public Speaking

Essential Questions	Instructional Objectives/ Skills and Benchmarks (CPIs)	Activities	Assessments
<p>Can you learn and recognize when to use the necessary algorithms to solve Rubik's Cube?</p> <p>Can you perform the necessary algorithms to solve while under pressure?</p> <p>Can you collaboratively design a presentation to instruct others how to solve Rubik's Cube?</p> <p>While partnered with another gifted student, can you teach a class of non-solvers how to solve the first layer of Rubik's Cube?</p>	<p>Students will: Independently research Rubik's Cube move notations and necessary algorithms to solve.</p> <p>Demonstrate ability to use algorithms to decode Rubik's Cube.</p> <p>Establish strategies to overcome performance-related anxiety when solving.</p> <p>Use digital tools to create a presentation that they can use to explain their method of how to solve Rubik's Cube.</p> <p>Present their knowledge of how to solve Rubik's Cube while interactively instructing a class of general education students.</p>	<p>Independently seek out resources that may be used to learn move notations and algorithms necessary to solve Rubik's Cube.</p> <p>Share resources with classmates to establish a learning community.</p> <p>Participate in the "Rubik's Rivalry", where by each member of team is timed when solving the cube's three layers.</p> <p>Groups will then create and present a presentation to teach the essential elements of this puzzle to a general education math class.</p> <p>Groups will push-in to a general education math class to interactively teach them how to solve the first layer of Rubik's Cube.</p>	<p>Group discussion</p> <p>Class participation</p> <p>Teacher observation</p> <p>Self assessment</p> <p>Three-round contest results</p> <p>Weekly group self-assessment rubric</p> <p>Final presentation rubric</p>

Unit 3: 6th Grade Writing

Essential Questions	Instructional Objectives/ Skills and Benchmarks (CP/s)	Activities	Assessments
<p>Can you apply above-level vocabulary words to communicate your thoughts in completing gifted unit activities?</p> <p>Can you identify the qualities of a poem which give it merit?</p> <p>Can you construct an original poem that supports a theme?</p> <p>Do you understand the benefits of applying figurative language in your verbal communications?</p>	<p>Students will: Understand how to use forty above- grade-level vocabulary words.</p> <p>Apply learned words to verbal communication tasks throughout the year.</p> <p>Be accountable for previous years' gifted vocabulary lists.</p> <p>Apply their writing skills as they complete each unit's culminating activity.</p> <p>Be able to apply understanding of poetry to the writing of an original poem.</p> <p>Learn and apply nine literary tools to enhance the level of their verbal communication.</p>	<p>Students will use Quizlet app to digitally rehearse meanings and usage of "Color Boost" list words.</p> <p>Students will use newspaper websites (e.g. nytimes.com, nj.com) to search words in context and to record sentences.</p> <p>Students will complete writing activities for grade level gifted units.</p> <p>Students will create vocabulary "Word Wall."</p> <p>Students will write and enter original poetry into a contest.</p> <p>Students will practice using all literary tools symbolized in the acronym S.H.O.P.A.R.A.M.A. in their verbal communications.</p>	<p>Various tests on vocabulary words</p> <p>Use of vocabulary words in assignments</p> <p>Final writing portions of unit activities rubric</p> <p>Group discussion</p> <p>Class participation</p> <p>Teacher observation</p> <p>Peer assessment</p> <p>Self assessment</p> <p>Completion of original poetry to be entered into contest</p>

Unit 4: 6th Grade Science/STEM/Business

Essential Questions	Instructional Objectives/ Skills and Benchmarks (CPIs)	Activities	Assessments
Do you understand Thomas Edison's historical significance to science?	Students will: Assess Edison's contributions to science.	Research life and contributions Thomas Edison made to science.	Group discussion Class participation
Can you model Edison's invention process to create an original innovation?	Apply invention process to an original innovation. Prove idea is original and has not been patented.	Visit The Thomas Edison National Historic Site and learn steps of Edison's invention process.	Teacher observation Self assessment
Do you understand how to prove your innovation has not been patented?	Develop collaborative skills in applying open grouping to form small groups and select one idea to develop.	Individually brainstorm ideas that may lead to innovation.	Weekly progress group self-assessment rubric
Can you engineer an effective prototype that will allow you to demonstrate your idea?	Be able to design and build an effective prototype.	In groups, devise original invention or innovation that can be proven to be original on USPTO.gov.	Final prototype Final commercial
Can you persuade someone both digitally and publically to want to buy your innovation?	Learn how to use digital editing software to create an effectively persuasive commercial. Practice public speaking as they prepare to sell innovation to a panel of judges.	Engineer prototype and physical display to present idea to a panel of judges. Use video editing software to create commercial.	Judge's rubric of final presentation during Invention Convention

Pacing Guide- Grade 7

<u>Content</u>	<u>Number of Days</u>
Unit 1: Logic/STEM	Sept. – Dec.
Unit 2: Business/STEM/Math/Public Speaking	Jan. – April
Unit 3: Writing	On Going
Unit 4: Social Studies	April – June

Unit 1: 7th Grade Logic/STEM

Essential Questions	Instructional Objectives/ Skills and Benchmarks (CPIs)	Activities	Assessments
<p>Can you engineer a tower in a fixed time-frame using predefined materials that is taller than those of other gifted students?</p> <p>Can you enhance your tower-building result when partnered with another gifted student?</p> <p>Can you learn and recognize when to use the necessary algorithms to solve Rubik's Cube?</p> <p>Can you teach how to solve Rubik's Cube while under pressure to other gifted students?</p>	<p>Students will: Research and refine architectural plans.</p> <p>Implement said plan, to construct towers.</p> <p>Partner, collaborate, redefine, and execute their new plans.</p> <p>Reflect on collaborating versus working alone.</p> <p>Demonstrate ability to use algorithms to solve Rubik's Cube.</p> <p>Verbalize their knowledge of how to solve the Rubik's Cube to new students in the program.</p> <p>Develop ways to combat performance-related anxiety as they compete.</p>	<p>Students will participate in the "Paper Tower to the Stars" competition.</p> <p>Students will individually design and then build a paper tower using specified materials.</p> <p>Students will compete in phase II of the by collaboratively designing and constructing tower II.</p> <p>Collaboratively seek out resources that may be used to learn move notations and algorithms necessary to solve Rubik's Cube.</p> <p>Participate in the "Rubik's Rivalry", where by each member of team is timed when solving cube's three layers.</p>	<p>Group discussion</p> <p>Class participation</p> <p>Teacher observation</p> <p>Self assessment</p> <p>Results in competition during phase I</p> <p>Results in competition during phase II</p> <p>Rubric for reflection</p> <p>Individual and group results to Rubik's Rivalry</p>

Unit 2: Business/STEM/Math/Public Speaking

Essential Questions	Instructional Objectives/ Skills and Benchmarks (CPIs)	Activities	Assessments
<p>Will you understand that starting a business is a complex venture?</p> <p>Can you work with “business partners” to make a business plan and execute decisions?</p>	<p>Student will: Learn to partner with other students and divvy up jobs to enhance outcomes.</p> <p>Compete in teams in a themed business contest.</p>	<p>Students will work in teams to create their own businesses.</p> <p>Students will brainstorm possible ventures based on the assigned theme.</p>	<p>Group discussion</p> <p>Class participation</p> <p>Teacher observation</p> <p>Self assessment</p>
<p>Do you understand the basic premise as to how profit is generated in any business?</p>	<p>Learn to collaborate using Google Docs to share information and digital products.</p>	<p>A business name, logo, and tagline will be created.</p>	<p>Weekly progress group self-assessment rubric</p>
<p>Do you know how to use Google Docs to share documents with your business partners?</p>	<p>Establish and document startup costs necessary to run a business.</p>	<p>Initial startup costs will be established.</p>	<p>Completion of weekly checklisted items</p>
<p>Do you understand the importance of branding, logos, and tag lines to the success of a business?</p>	<p>Investigate the way in which real businesses use the internet to generate demand for their brand.</p>	<p>Startup costs and projected periodic costs will be recorded on a spreadsheet.</p>	<p>Judge’s rubric of final presentation during competition</p>
<p>Do you understand the variables that would be used to establish start-up costs for your business?</p>	<p>Be introduced to real business owners.</p> <p>Explore electrical circuits as they design a model of a</p>	<p>Plan for marketing and advertising will be established.</p> <p>Faux social media pages and websites will be created.</p> <p>Projected revenue/profit will be realistically speculated</p>	<p>Rubric for reflection</p>

<p>Do you know how to use the internet to generate demand for your business?</p> <p>Can you create a spreadsheet that records costs and projected profit?</p> <p>Can you engineer a realistic model of your business to share with a group of judges?</p> <p>Can you orally present, using a business portfolio and alluring booth display, your team's vision to persuade a group of judges?</p>	<p>business.</p> <p>Learn what an effective business portfolio may have to establish credibility to investors.</p> <p>Develop a presentation that will effectively persuade a group of judges as to the viability of a business.</p> <p>Develop their public speaking skills as a result of competing in a business competition.</p> <p>Practice the skill of reflection as they are asked to write about their experience of competing in a business competition.</p>	<p>and recorded based on available data.</p> <p>Business portfolio will be produced to use as a resource to answer judges' questions during competition.</p> <p>Model of business will be designed and engineered to share with the judges.</p> <p>Presentation booth will be created to accentuate the positive business choices made by each team.</p> <p>Real business owners will be invited to speak to students and act as judges in competition.</p> <p>After the competition, the students will write a reflection of their business choices to promote further growth and understanding.</p>	
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Unit 3: 7th Grade Writing

Essential Questions	Instructional Objectives/ Skills and Benchmarks (CPIs)	Activities	Assessments
<p>Can you apply above-level vocabulary words to communicate your thoughts in completing gifted unit activities?</p> <p>Can you identify the qualities of a poem which give it merit?</p> <p>Can you construct an original poem that supports a theme?</p> <p>Do you understand the benefits of applying figurative language in your verbal communications?</p>	<p>Students will: Understand how to use forty new above-grade-level vocabulary words.</p> <p>Apply learned words to verbal communication tasks throughout the year.</p> <p>Be accountable for previous years' gifted vocabulary lists.</p> <p>Apply their writing skills as they complete each unit's culminating activity.</p> <p>Be able to apply understanding of poetry to the writing of an original poem.</p> <p>Learn and apply nine literary tools to enhance the level of their verbal communication.</p>	<p>Students will use Quizlet app to digitally rehearse meanings and usage of new "Color Boost" list words.</p> <p>Students will use newspaper websites (e.g. nytimes.com, nj.com) to search words in context and to record sentences.</p> <p>Students will complete writing activities for grade level gifted units.</p> <p>Students will create vocabulary "Word Wall."</p> <p>Students will write and enter original poetry into a contest.</p> <p>Students will practice using all literary tools symbolized in the acronym S.H.O.P.A.R.A.M.A. in their verbal communications.</p>	<p>Various tests on vocabulary words</p> <p>Use of vocabulary words in assignments</p> <p>Final writing portions of unit activities rubric</p> <p>Group discussion</p> <p>Class participation</p> <p>Teacher observation</p> <p>Peer assessment</p> <p>Self assessment</p> <p>Completion of original poetry to be entered into contest</p>

Unit 4: 7th Grade Social Studies

Essential Questions	Instructional Objectives/ Skills and Benchmarks (CPIs)	Activities	Assessments
Do you understand the historically significant events that occurred in the Boston area with regard to the birth of our nation?	Students will: Learn and identify historically significant events that occurred in Boston, Salem, and Plymouth.	Research essential historical events occurring in the Boston area leading up to and including The Revolution.	Group discussion Class participation Teacher observation
Do you understand the historical significance of the Salem Witch Trials?	Learn to collaborate with students from another middle school.	In groups, become an expert of one element of the history of the Boston area and teach this topic to the class.	Peer assessment Self assessment
Do you understand the hardships and significance of what the pilgrims of the Plymouth Bay Colony endured?	Delve deeper into the historical significance of one topic. Teach others about what they discovered about their specific topic.	Use technology to summarize pertinent points of your group's discovery. Write questions that summarize relevant points to be used to access class' knowledge of topics.	Final digital presentation Final Jeopardy-style competition
Can you pinpoint the most significant facts about a specified historical topic and decide how best to teach them to your peers?	Collaborate to compile a digital review of all specific topics that were researched.	Embark on a three-day journey to Boston/Plymouth/Salem to experience first hand the significance of the topics studied. (Optional)	

Pacing Guide- Grade 8

<u>Content</u>	<u>Number of Days</u>
Unit 1: Logic/STEM	Sept. – Dec.
Unit 2: Social Studies	Jan. – March
Unit 3: Writing	On-going
Unit 4: Science/STEM/Math	March – June

Unit 1: 8th Grade Logic/STEM

Essential Questions	Instructional Objectives/ Skills and Benchmarks (CPIs)	Activities	Assessments
<p>Can you engineer a tower in a fixed time-frame using predefined materials that is taller than those of other gifted students?</p> <p>Can you enhance your tower-building result when partnered with another gifted student?</p>	<p>Students will: Research and refine architectural plans. Implement said plan, to construct towers. Partner, collaborate, redefine, and execute their new plans.</p>	<p>Students will participate in the “Pasta Tower to the Stars” competition. Students will individually design and then build a pasta tower using specified materials.</p>	<p>Group discussion Class participation Teacher observation Self assessment</p>
<p>Can you learn and recognize when to use the necessary algorithms to solve Rubik’s Cube?</p>	<p>Reflect on collaborating versus working alone. Demonstrate ability to use algorithms to solve Rubik’s Cube.</p>	<p>Students will compete in phase II of the by collaboratively designing and constructing tower II. Collaboratively seek out resources that may be used to learn move advanced notations and algorithms to solve Rubik’s Cube.</p>	<p>Results in competition during phase I Results in competition during phase II Rubric for reflection</p>
<p>Can you teach how to solve Rubik’s Cube while under pressure to other gifted students?</p> <p>Can you reexamine the algorithms you used in solving Rubik’s Cube and find more efficient ones to replace them?</p>	<p>Use their advanced knowledge of how to solve Rubik’s Cube to instruct new students in the program. Develop ways to combat performance-related anxiety as they compete.</p>	<p>Participate in the “Rubik’s Rivalry”, where by each member of team is timed when solving cube’s three layers.</p>	<p>Individual and group results to Rubik’s Rivalry</p>

Unit 2: 8th Grade Social Studies

Essential Questions	Instructional Objectives/ Skills and Benchmarks (CPI/s)	Activities	Assessments
<p>Do you understand the historically significant events that occurred in the Philadelphia area with regard to the birth of our nation?</p> <p>Do you understand the historical significance of the Liberty Bell?</p> <p>Have you considered going to college near Philadelphia?</p> <p>How can you compare the campuses of the University of Pennsylvania, Drexel University, and Temple University?</p> <p>Can you pinpoint the most significant facts about a specified historical topic and decide how best to teach them to your peers?</p>	<p>Students will: Learn and identify historically significant events that occurred in Boston, Salem, and Plymouth.</p> <p>Learn to collaborate with students from another middle school.</p> <p>Delve deeper into the historical significance of one topic.</p> <p>Teach others about what they discovered about their specific topic.</p> <p>Collaborate to compile a digital review of all specific topics.</p> <p>Use collaboration to digitally document the memorable events of their trip to Philadelphia.</p>	<p>Research essential historical events occurring in the Philadelphia area leading up to and including The Revolution.</p> <p>In groups, become an expert of one element of the history of the Philadelphia area and its colleges, and teach this topic to the class.</p> <p>Use technology to summarize pertinent points of your group's discovery.</p> <p>Embark on a three-day journey to Philadelphia to experience first hand the significance of the topics studied. (Optional)</p> <p>Design a digital log to recount the relevant highlights of the trip.</p>	<p>Group discussion</p> <p>Class participation</p> <p>Teacher observation</p> <p>Peer assessment</p> <p>Self assessment</p> <p>Final digital group presentations</p> <p>Completed collaborative digital log</p>

Unit 3: 8th Grade Writing

Essential Questions	Instructional Objectives/ Skills and Benchmarks (CPIs)	Activities	Assessments
<p>Can you apply above-level vocabulary words to communicate your thoughts in completing gifted unit activities?</p>	<p>Students will: Understand how to use forty new above- grade-level vocabulary words.</p>	<p>Students will use Quizlet app to digitally rehearse meanings and usage of new “Color Boost” list words.</p>	<p>Various tests on vocabulary words</p>
<p>Can you help other gifted students hone their understanding of advanced vocabulary?</p>	<p>Apply learned words to verbal communication tasks throughout the year.</p>	<p>Students will design resources to reinforce previous lists word meanings with gifted peers.</p>	<p>Use of vocabulary words in assignments</p>
<p>Can you identify the qualities of a poem which give it merit?</p>	<p>Be accountable for previous years’ gifted vocabulary lists.</p>	<p>Students will complete writing activities for grade level gifted units.</p>	<p>Final writing portions of unit activities rubric</p>
<p>Can you construct an original poem that supports a theme?</p>	<p>Apply their writing skills as they complete each unit’s culminating activity.</p>	<p>Students will write and enter original poetry into a contest.</p>	<p>Group discussion</p>
<p>Do you understand the benefits of applying figurative language in your verbal communications?</p>	<p>Be able to apply understanding of poetry to the writing of an original poem.</p> <p>Learn and apply nine literary tools to enhance the level of their verbal communication.</p>	<p>Students will practice using all literary tools symbolized in the acronym S.H.O.P.A.R.A.M.A. in their verbal communications.</p>	<p>Class participation</p> <p>Teacher observation</p> <p>Peer assessment</p> <p>Self assessment</p> <p>Completion of original poetry to be entered into contest</p>

Unit 4: 8th Grade Science

Essential Questions	Instructional Objectives/ Skills and Benchmarks (CPIs)	Activities	Assessments
<p>Can you work with a team to make critical decisions to solve higher order problems?</p> <p>Do you understand current data regarding the surface and presence of life on Mars.</p> <p>Can you use effective communication skills to debate the pros and cons of landing a space crew on the planet Mars?</p> <p>Can you design a rover that will be able to propel itself up an inclined plane symbolic of Mars' Gale Crater?</p>	<p>Students will: Make decisions regarding the ethical and fiscal decision to land humans on the planet Mars.</p> <p>Debate the pros and cons of landing a space crew on the planet Mars.</p> <p>Work with a team to solve an engineering challenge.</p> <p>Create, test, redefine, and launch a rover device using predetermined materials and on a predetermined inclined plane.</p> <p>Measure, evaluate, and make decisions based on the outcome of their rover's journey.</p> <p>Reflect, in writing, regarding the factors that influenced their rover's result.</p>	<p>Research the essential components related to space travel to Mars.</p> <p>Research and collaboratively discuss the status of the major players in the race to land man on Mars.</p> <p>Visit the Buehler Challenger and Space Center to learn about Mars and partake in a simulating Mars landing.</p> <p>Debate the topic of landing humans on Mars.</p> <p>Collaboratively design, build and launch a rover using specific parameters to compete in the "Rover Rumble".</p> <p>Chart and analyze results of "The Rover Rumble".</p>	<p>Group discussion.</p> <p>Class participation.</p> <p>Teacher observation.</p> <p>Self-assessment.</p> <p>Weekly progress group self-assessment rubric</p> <p>Completion of weekly check listed items</p> <p>Results of Rover Rumble</p> <p>Excel worksheets.</p>

Grades 6-8 Standards

- NGS MS-ESS1-3. Analyze and interpret data to determine scale properties of objects in the solar system.
- NGS MS-ESS1-1, MS-ESS1-2 Develop and use a model to describe phenomena.
- NGS 3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.
- NGS3-5-ETS1-2. 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.
- 21st Century Life and Careers 9.2.8.B.3 Evaluate communication, collaboration, and leadership skills that can be developed through school, home, work, and extracurricular activities for use in a career.
- 21st Century Life and Careers 9.1.8.D.5 Explain the economic principle of supply and demand.
- 21st Century Life and Careers 9.1.8.A.1 Explain the meaning and purposes of taxes and tax deductions and why fees for various benefits (e.g., medical benefits) are taken out of pay.
- 21st Century Life and Careers 9.1.8.A.2 Relate how career choices, education choices, skills, entrepreneurship, and economic conditions affect income.
- 21st Century Life and Careers 9.1.8.A.7 Explain the purpose of the payroll deduction process, taxable income, and employee benefits.
- 21st Century Life and Careers 9.1.12.B.6 Design and utilize a simulated budget to monitor progress of financial plans.
- 21st Century Life and Careers 9.1.8.C.5 Calculate the cost of borrowing various amounts of money using different types of credit (e.g., credit cards, installment loans, mortgages).
- 21st Century Life and Careers 9.1.8.G.2 Determine criteria for deciding the amount of insurance protection needed.

21st Century Life and Careers 9.3.12.AG - FD.1 Develop and implement procedures to ensure safety, sanitation and quality in food product and processing facilities.

21st Century Life and Careers 9.3.12.AC.3 Comply with regulations and applicable codes to establish and manage a legal and safe workplace.

21st Century Life and Careers 9.3.12.AC - DES.6 Apply the techniques and skills of modern drafting, design, engineering and construction to projects.

NJ Technology Standards:

8.1.8.A.1 Create professional documents (e.g., newsletter, personalized learning plan, business letter or flyer) using advanced features of a word processing program.

8.1.8.A.3 Create a multimedia presentation including sound and images.

8.1.8.A.4 Generate a spreadsheet to calculate, graph, and present information.

8.1.8.A.5 Select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.

8.1.12.A.2 Produce and edit a multi-page document for a commercial or professional audience using desktop publishing and/or graphics software.

8.1.12.B.1 Design and pilot a digital learning game to demonstrate knowledge and skills related to one or more content areas or a real world situation.

8.1.8.E.1 Gather and analyze findings using data collection technology to produce a possible solution for a content-related or real-world problem.

8.2.8.B.1 Design and create a product that addresses a real-world problem using the design process and working with specific criteria and constraints.

8.2.8.B.2 Identify the design constraints and trade-offs involved in designing a prototype (e.g., how the prototype might fail and how it might be improved) by completing a design problem and reporting results in a multimedia presentation.

8.2.8.B.3 Solve a science-based design challenge and build a prototype using science and math principles throughout the design process.

8.1.12.D.2 Demonstrate appropriate use of copyrights as well as fair use and Creative Commons guidelines.

8.2.8.C.1 Explain the need for patents and the process of registering one.

8.2.8.E.1 Work in collaboration with peers and experts in the field to develop a product using the design process, data analysis, and trends, and maintain a digital log with annotated sketches to record the development cycle.

8.2.8.F.2 Explain how the resources and processes used in the production of a current technological product can be modified to have a more positive impact on the environment (e.g., by using recycled metals, alternate energy sources) and the economy.

CCSS.ELA-LITERACY.RI.8.4 Determine the meaning of words and phrases as they are used in a text, including figurative, , and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.

CCSS.ELA-LITERACY.RI.8.7 Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.

CCSS.ELA-LITERACY.RI.8.10 By the end of the year, read and comprehend literary nonfiction at the high end of the grades 6-8 text complexity band independently and proficiently.

CCSS.ELA-LITERACY.W.8.1 Write arguments to support claims with clear reasons and relevant evidence.

CCSS.ELA-LITERACY.W.8.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

CCSS.ELA-LITERACY.W.8.6

Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.

- CCSS.ELA-LITERACY.W.8.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
- CCSS.ELA-LITERACY.W.8.10 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 discipline-specific tasks, purposes, and audiences.
- CCSS.ELA-LITERACY.SL.8.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.
- CCSS.ELA-LITERACY.SL.8.4 Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.
- CCSS.ELA-LITERACY.SL.8.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.
- CCSS.ELA-LITERACY.L.8.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- CCSS.ELA-LITERACY.L.8.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
- CCSS.ELA-LITERACY.L.8.4 Determine or clarify the meaning of unknown and multiple-meaning words or phrases.
- CCSS.ELA-LITERACY.L.8.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
- CCSS.ELA-LITERACY.L.8.6 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.
- CCSS.ELA-LITERACY.RH.6-8.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

References

- Engineering For Kids*. N.p., n.d. Web. 04 May 2017 <http://www.engineeringforkids.org>
- Unlocking Emergent Talent: Supporting High Achievement of Low-Income, High Ability Students. Olszewski-Kubilius, Paula; Clarenbach. <https://eric.ed.gov/?id=ED537321>
- The three Ring Conception of giftedness: A developmental Model for promoting Creative Productivity by Joseph Renzulli. gifted.uconn.edu/.../01/The_Three-Ring_Conception_of_Giftedness.pdf
- Gifted Programming Standards November 2010 3750 NAGC . A Blueprint for Quality Gifted Education .10. www.nagc.org/sites/default/files/standards/K-12_standards_booklet.pdf
- Y., Bloom's Taxonomy Provides An Important Framework For Teachers To Use To Focus On, Higher Order Thinking. By Providing A Hierarchy Of Levels, This Taxonomy Can Assist Teachers, and In Designing Performance Tasks, Crafting Questions For Conferring With Students, And. *Bloom's Taxonomy* (n.d.): n. pag. Web. Multiple Intelligences by Howard Gardner
- Scratch - Imagine. Program, Share <https://scratch.mit.edu/educators/>

Middle School Writing Rubric

Writer's Name: _____

Topic of writing: _____

Assessed by: _____

Date: _____

Total Score _____

Category	1 - Beginning	2 - Developing	3 - Accomplished	4 - Exemplary	Score
Effectiveness of Opening - Did I understand and was I interested in hearing more about your topic after reading the opening?	Writer's attempt to hook audience and provide the main idea were lacking.	Writer's attempt to hook audience or provide the main idea were lacking.	Writer's attempt to hook audience and provide the main idea were demonstrated successfully.	Writer's attempt to hook audience and provide the main idea were outstanding.	
Clarity of Ideas - Did I clearly see and understand your main ideas?	Word choices do not clarify writer's ideas.	Word choices clarify writer's ideas some of the time.	Word choices clarify writer's ideas.	Word choices creatively clarify writer's ideas.	
Proper grammar and good sentences - Did I have an easy time understanding your sentences?	Grammatical errors and lack of sentence variation made the writing difficult to read.	Grammatical errors or lack of sentence variation made the writing difficult to read.	Correct grammar or having sentence variations made the writing simple to read.	Correct grammar and having sentence variations made the writing enjoyable to read.	
Organization of Ideas - Was I able to follow and was I convinced by your thought process?	The lack of order and strength of the ideas presented made the writing unconvincing.	The order or strength of the ideas presented made the writing sometimes unconvincing.	The order and strength of the ideas presented made the writing convincing.	The order and strength of the ideas presented made the writing extremely convincing.	
Effectiveness Of Closing - Did I know and was I convinced of the point being made?	Main idea and final convincing thought were not mentioned in closing.	Main idea or final convincing thought were not effectively conveyed in closing.	Main idea and final convincing thought were effectively conveyed in closing.	Main idea and final convincing thought were highly effectively conveyed in closing.	
Accuracy of Mechanics - Did I see good spelling, capitalization, punctuation and legibility?	Spelling, legibility and punctuation errors made the writing difficult to read.	Spelling, legibility or punctuation errors made the writing difficult to read.	Correct Spelling, legibility and punctuation made the writing easy to read.	Correct Spelling, legibility and varied punctuation made the writing enjoyable to read.	

Comments: _____

Union Township Gifted and Talented Student Evaluation Form

Student's Name: _____ School: _____ Grade: _____ Year: _____

Independent Skills	Creativity	Communication Skills
Research 3 2 1	Originality 3 2 1	Verbal 3 2 1
Problem Solving 3 2 1	Lateral Thinking 3 2 1	Interpersonal 3 2 1
Organization 3 2 1		Written 3 2 1

Specific Skills	Work Habits/Behaviors
Technology 3 2 1	Class Participation/Timeliness 3 2 1
Public Speaking 3 2 1	Shows ambition 3 2 1
Following Directions 3 2 1	Homework Completion 3 2 1
Decision-Making 3 2 1	Takes initiative/accepts responsibility 3 2 1

3 = Above Level of Average G&T Student 2 = At level of Average G&T Student 1 = Below level of Average G&T Student

Passing Score: 32 Student's Score: Mid-Year _____ Final _____

Comments: _____