

Overview
Unit Title: The Superhero Journey and Making the World a Better Place – INNOVATION + Digital Citizenship
Target Grade Levels: Intermediate (3-5)
<p>Big Ideas:</p> <p>A successful maker/innovator/change agent/superhero has qualities that contribute to his or her success.</p> <p>Digital Citizenship means being safe, responsible, respectful and knowledgeable while using technology.</p> <p>A good Digital Citizen knows how to type so he or she can communicate.</p>
<p>Unit Summary:</p> <p>Innovators help make the world a better place. We try to understand people, identify problems and create solutions.</p> <p>Good Digital Citizens know how to be leaders online, including communicating correctly.</p>
<p>Essential Questions:</p> <p>What value does imaginative and fearless thinking add to something I create or something I do?</p> <p>How does engaging in making and creating make me a change agent?</p> <p>How can I learn to communicate effectively online? (grades 3-5 via Typing Agent)</p> <p>Interdisciplinary connections:</p> <p>Science – Invention, Manufacturing, Ingenuity, Human effect on environment</p> <p>Technology – Use of tools, construction, typing/word processing, Digital Citizenship</p> <p>Engineering – Design process, construction</p> <p>Arts – Invention, Creativity, Imagination</p> <p>Math – Measurement, Problem Solving, Perseverance</p>
Standards Addressed
<p>Technology/21st Century Skills: Creativity and Innovation, Critical Thinking, Problem Solving and Decision Making, Typing/Wordprocessing, Digital Citizenship</p> <p>Engineering:</p> <p>3-5-ETS1-1. – Define a simple design problem reflecting a need or want that includes specified criteria for success and constraints on materials, time, or cost.</p> <p>3-5-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.</p> <p>3-5-ETS1-3. – Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.</p> <p>Arts:</p> <p>AH-I-SA-U-2 – Understand the principles of design and the elements of visual arts.</p> <p>AH-I-SA-U-4 – Understand that existing and emerging technologies can inspire new applications of structural components.</p> <p>RI.5.9 – Integrate information from several texts in order to write or speak about a subject knowledgeably.</p> <p>W.5.9 – Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>Math:</p>

*Lesson plans subject to change.

**Accommodations/Modifications – for student specific accommodations, see *Confidential Folder* in wall tray.

CCSS.Math.Practice.MP2 – Reason abstractly and quantitatively.

CCSS.Math.Practice.MP4 – Model with mathematics.

CCSS.Math.Practice.MP5 – Use appropriate tools strategically.

Learning Targets	Learning Activities/Instructional Strategies	Evaluation/Assessment
<p>I CAN... ...define a makerspace. ...brainstorm. ...analyze, by citing evidence, what qualities makers and innovators have that contribute to success. ...work towards completing engineering and design challenges demonstrating my ability to think creatively and showing my prowess as a problem solver. ...use the home row keys – ASDFGHJKL; - and correct finger placement to type at 90% accuracy and at least 20 wpm. (Grades 3-5 only)</p>	<p>Daily Structure: Superhero Briefing (10 minutes, whole group, direct instruction) Training Academy (40 minutes, independent, small group practice) Reflection (10 minutes, whole group, independent reflection)</p> <p>Students will rotate through 6 learning stations: Station 1: Superhero Journey – What is a superhero? Discuss FORTITUDE as one of four core forces that make superhero and challenge to obtain skills to “level up” in STEAM. Character Kaleidoscope Superhero uniform – The superhero uniform expresses our unique nature and unites us in purpose. Each uniform is handcrafted, designed with a superhero symbol that represents what each superhero stands for. And each cape calls us into the myth of the hero when it communicates to others that we are here to serve. Superpowers <i>What makes someone creative?</i> <i>What qualities do makers and innovators have that contribute to their successes? How do makers and innovators overcome failure?</i> <i>What is Brainstorming?</i> Brainstorming is a process of spontaneous thinking used by an individual or by a group of people to generate numerous alternative ideas while deferring judgment. Introduced by Alex Osborn in his book, “Applied Imagination,” brainstorming is the crux of each of the stages of all problem-solving methods. Review Rules for Brainstorming: No Criticism</p>	<ul style="list-style-type: none"> • Anecdotal notes • Teacher observation • Discovery Journal • Daily Student Reflections • Self-Assessment • DIY Projects • DIY Products <div data-bbox="1455 816 1919 878" style="background-color: #2c5e8c; color: white; text-align: center; padding: 5px;">Intervention Resources</div> <p>Brainpop.com – “Imagination” Selective Attention Test</p> <div data-bbox="1461 1049 1925 1110" style="background-color: #2c5e8c; color: white; text-align: center; padding: 5px;">Questioning</div> <p>How have today’s experiences inspired me? What was my biggest success today? What was my biggest failure today? How would I reteach what I learned?</p> <p>How is what I created... ...beautiful? ...thoughtful? ...personally meaningful?</p>
Critical Vocabulary		
<p>Makerspace LittleBits/Electrical Circuits Imagination Home Row (Grades 3-5) Word Processing</p>		
Accommodations/Modifications**		
<p>Visual Timer Redirection Corrective Feedback</p>		

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Preferential Seating Model targeted skills/direction Structured transition w/advanced warning Frequent and positive feedback	Work for Quantity Hitchhiking Welcome Freewheeling Encouraged Station 2: Design Thinking – Extraordinaire Game Station 3: Little Bits – Electrical Circuits Station 4: Little Bits – Electrical Circuits Station 5: Star Wars Coding Station 6: Typing Agent NO HOMEWORK	...sophisticated? ...shareable? ...moving? ...enduring?			
Teacher Reflection/Notes					
Higher Order Thinking	Scaffolding	21 st C. Skills	Learning Styles	Student Reflection	Project-based
Student Choice	Global Perspective	Interdisciplinary	Student-Centered	Critical Thinking	Differentiation
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