**Syllabus for** [**21Things4Students.net**](http://21things4students.net/) **2018-19**

**Goal**

The goal of the 21things4students project is to provide a fun projects for students using different Web 2.0 tools available Free on the Internet. We hope to help increase students’ technology proficiency for future and help prepare them for online testing by providing free resources.

**Aligned to Standards**

The purpose of the ***21things for the 21st Century Student*** *(****21Things4Students.net****) web resource* is to provide ”Just in Time” training through an online interface based on the ISTE Standards•S at grade levels 5 - 9. These standards are the basic technology skills students should possess. The site received the ISTE Seal of Alignment in 2015 and renewed in 2017 through 2019.

**Online Learning**

Students can complete 21 (technology and curriculum integrated) units within a blended or hybrid classroom to learn basic technology skills using a variety of web tools under the direction of an instructor. Most lessons, or “things”, include a “how to” video, hands-on activities, ties to the ISTE Standards for Students, curriculum standards, and an overview of how a Web 2.0 tool can be used. Participants will demonstrate proficiency in each of the 21 Things by creating end products, or a Digital Portfolio.

**Resources Necessary**

Everything used in the 21 Things 4 Students is FREE and can be completed on a PC or Mac. Teachers and students (or student accounts set up by the teacher) will use the following:

**Accounts:** Email, Google or Microsoft, Prezi, PBS Learning Media, Edmodo, Symbaloo and AppBuilder

**Programs or applications**: Java, Flash (for a few interactives to work), Dropbox account (if possible)

**Hardware:** Computing device with Internet Access (PC, Mac, Chromebook, iPad…). Headphones & access to a Microphone is suggested, digital camera device and/or webcam helpful for Digital Images, and the ability to run the programs in the individual Quests as listed in this syllabus.

**Videos**: Please check your access to play the videos from [http://mistreamnet.org](http://mistreamnet.org/)

## 1. Basic Orientation

This section contains basic skill information and terminology that will help students complete the other 20 things. It is divided into three areas: Tech Tips, TechSkills, and Basics Gold (optional activities)

**Learning Objectives**
When you have completed this Thing you will:

1. be able to navigate the 21 Things 4 Students website (Knowledge Constructor]
2. understand basic technology operations [Empowered Learner]
3. understand my school's Acceptable Use of Technology Policy [Digital Citizen]
4. know how to improve keyboarding skills [Empowered Learner]
5. understand basic email etiquette and safety [Digital Citizen]

## TechTips Quests Q1-Q4

* *Quest 1* - Navigation Tips: Tricks for navigating the 21things4students site and using the menus. Downloading the 21t4s Roadmap/Tracking Document that is used to track progress through the course.
* *Quest 2* - Image Capture: Learn how to do a screenshot (Windows, Mac, Chromebook, iPad). View the Screen Capture videos from mistreamnet.org.
* *Quest 3* - Shortcuts: Learn keyboard shortcuts.
* *Quest 4* – Web Browsers: Learn about browsers, minimize, maximize, restore, resize, tabs, new windows, zoom in and out, find, history, and browser shortcuts.

## TechSkills Quests Q5-Q8

* *Quest 5 - Tech Gymnastics:* Take a Typing Test.
* *Quest 6 - Safe & Secure:* Find out about your school AUP, take a judgement challenge, and learn more about passwords and usernames.
* *Quest 7 - Email:* Introduces the concept of Email and covers basic email terms and functions.
* *Quest 8 - Email Etiquette:* Covers many of the basic safety and social appropriateness considerations associated with using Email.

### Basics Gold Quests

* Files and Domains - Looks at filenames, formats, and domains
* Techie Equipment - A quick look in history, engages students in interviewing their parents or relatives and entering the information into a survey.
* Valuable Communication Tools - Benefits of Email, and different communication means

## ISTE Standards for Students Addressed1. Empowered Learnera. Articulate and set personal learning goalsc. Use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of waysd. Understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies, are able to transfer their knowledge to explore emerging technologies

**2.Digital Citizen**
b. Engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices
d. Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.

**3. Knowledge Constructor**
a. Use digital tools to prepare to navigate and to identify technology skill areas
c. Evaluate the accuracy perspective, credibility and relevance of information, media, data or other resources

**7. Global Collaborators**
c. Contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal

## Common Core Standards Addressed

CCSS.ELA-Literacy.CCRA.W.2 Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
CCSS.ELA.Literacy.CCRA.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

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# **2. Visual Learning**

**Learning Objectives**

When you have completed this Thing you will:

1. Know how to set a personal learning goal and reflect on my progress [Empowered Learner]
2. Be able to organize and manage information [Knowledge Constructor]
3. Understand how to use a scientific design process to collect and analyze information [Innovative Designer]
4. Be able to express myself and share my ideas and work digitally [Creative Communicator]
5. Be able to collaborate with a group to create an original design [Creative Communicator, Innovative Designer]

## Quests 1-4

* *Quest 1* - *Fire Rescue:* Watch a training video on Gliffy or Popplet, create a visual map, and create a graphic organizer. Share a screenshot of your work and save it to your File Space to share with your teacher.
* *Quest 2* - *Thrill Rides:* Use a graphic organizer and create a visual map. Save a screenshot to your File Space. Take a survey and compare your responses to others.
* *Quest 3* - *Quick Response:* Watch a video to learn about QR codes. Learn how to create a QR code. Explore the use of QR codes on mobile devices.
* Quest 4- STEAM Roller Coaster: Use your knowledge of mass, gravity, potential and kinetic energy to design roller coasters that will not stall or crash.

## ISTE Standards for Students Addressed1. Empowered Learnerc. Use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways

## 3. Knowledge Constructora. Plan and employ effective research strategies to locate information, media, data or other resources

## c. Curate information from digital resources using a variety of tools and methods

## 4. Innovative Designera. Know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problemsb. Select and use digital tools to plan and manage a design process that considers design constraints and calculated risksc. Develop, test and refine prototypes as part of a cyclical design processd. Exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems

## 5. Computational Thinkerb. Collect data or identify relevant data sets

## 6. Creative Communicatorb. Create original works or responsibly repurpose or remix digital resources into new creationsc. Create original works or responsibly repurpose or remix digital resources into new creations

### Common Core Standards Addressed

MS-PS 3 a, b Energy
CCSS.ELA-Literacy.CCRA.W.1 Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence.
CCSS.ELA-Literacy.CCRA.W.2 Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
CCSS.ELA-Literacy.CCRA.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

# **3. Cloud Initiation**

**Learning Objectives**
When you have completed this Thing you will:

## know how to create, organize, use and share links (bookmarks) to favorite sites online [Empowered Learner]

## understand what the cloud in cloud computing means [Empowered Learner]

## be able to create, access, and share cloud bookmarks [Knowledge Constructor]

## Quests 1-4

● *Quest 1 - What is Cloud Computing?:* Watch a video and do some research on cloud computing, students write 150 words on how Cloud Computing will benefit them.

● *Quest 2 - Investigating Diigo:* Use Diigo either student or teacher created account, watch an introductory video,install the Diigo extension, save and tag bookmarks, highlight, annotate and capture bookmarks, and share your bookmarks

● *Quest 3 - Webix:* learn how to save, organize and share your bookmarks in the Cloud using Symbaloo

● Quest 4 - *Bookmarking in the Cloud*: Choose [Diigo](http://diigo.com/) or [Symbaloo](http://symbaloo.com/) to bookmark resources as you progress through the 21Things4Students Quests

## ISTE Standards for Students Addressed

## 1.Empowered Learnera. Articulate and set personal learning goals, develop strategies leveraging technology to achieve them, and reflect on the learning process itself to improve learning outcomesd. Understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies, are able to transfer their knowledge to explore emerging technologies

## 3. Knowledge Constructora. Plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuitsc. Curate information from digital resources using a variety of tools and methods

### Common Core Standards Addressed

ELA-Literacy.SL.6.2 Interpret information presented in diverse media and formats (e.g. visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.
ELA-Literacy.SL.7.2 Analyze the main ideas and supporting details presented in diverse media and formats (e.g. visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study
ELA-Literacy.SL.8.2 Analyze the purpose of information presented in diverse media and formats (e.g. visually, quantitatively, orally) and evaluated the motives (e.g. social, commercial, political) behind its presentation.
ELA-Literacy.CCRA.W.2 Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
ELA-Literacy.CCRA.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-Literacy.CCRA.W.2 Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
CCSS.ELA-Literacy.CCRA.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

# 4. Collaboration

**Learning Objectives**

When you have completed this Thing you will:

## understand how to use a word processing application [Empowered Learner]

## know how to use advanced word processing features [Creative Communicator]

## know how to share documents with others [Digital Citizen]

## know how to collaborate with others [Global Collaborator]

## Quests 1-7 (Q1-Q6, QM1- QM6) and 7

* *Quest 1 - Formatting Tools:* Students copy “Nothing Gold Can Stay” (provided) and format it using Drive tools.
* *Quest 2 - File Management:* Download an external .doc document from the web on this page, upload it to your Google Drive and open it, add it to the poem document you created in Quest 1, upload it, download it and print it.
* *Quest 3 - Graphics:* Students rename a document, insert a picture, add a citation, insert a horizontal line, and hyperlink to a separate report or document. They will also learn a bit more about copyright and computer ethics.
* *Quest 4 - Sharing:* Students share the “Nothing Gold Can Stay” document with the teacher.
* *Quest 5 - Tables:* Students add a 3x9 table to the “Nothing Gold Can Stay” document and create a rhyming scheme using the table
* *Quest 6 - Headers & Footers:* Students insert headers/footers on the “Nothing Gold Can Stay” document.
* *Quest 7 - Classroom Collaboration: T*he focus of this Quest is to support global collaboration with other classrooms or projects around the world.

ISTE Standards for Students Addressed

**1. Empowered Learner**
a. Articulate and set personal learning goals, develop strategies leveraging technology to achieve them, and reflect on the learning process itself to improve learning outcomes

d. Understand the fundamental concepts of technology operations, demonstrate the ability
choose, use and troubleshoot current technologies, are able to transfer their knowledge to explore emerging technologies

**2. Digital Citizen**

c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property

**6. Creative Communicator**
a. Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication
b. Create original works or responsibly repurpose or remix digital resources into their new creations
d. Publish or present content that customizes the message and medium for their intended audiences

**7. Global Communicator**
b. With guidance from an educator, students use technology tools to work with friends and with people outside their neighborhood, city and beyond
c. Contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal

# **5. Digital Footprint**

**Learning Objectives**
When you have completed this Thing you will:

1. know the concepts and actions that create a digital footprint [Digital Citizen]
2. understand that my digital footprint has an impact on my life [Digital Citizen, Empowered Learner]
3. understand the importance of electronic documentation [Empowered Learner]
4. be able to create a positive and safe online web presence [Innovative Designer, Digital Citizen]
5. be able to collaborate with classmates and work effectively toward a common goal [Global Communicator]

## Quests 1-4

● *Quest 1 - Managing Your Footprint: This Quest requires you to put your thinking cap on tight and do some reflection, make a record of your online activities using your own footprint, and calculate your media usage.*

● *Quest 2 - Your Evolving Footprint: Learn about the Digital Dossier and your own digital footprints.*

● *Quest 3 - Creating a Web Presence: At last! This is your opportunity to create your own digital presence online.*

● *Quest 4 - Blogs:* Learn about and create a blog.

## ISTE Standards for Students Addressed

## 1. Empowered Learner

## a. Articulate and set personal learning goals, developing strategies leveraging technology to achieve them, and reflect on the learning process itself to improve learning outcomes

## 2. Digital Citizen

## a. Cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital worldb. Engage in positive, safe, legal and ethical behavior when using using technologyd. Manage their personal data to maintain digital privacy and security

**6. Creative Communicator**

b. Create original works or responsibly repurpose digital resources into new creations

## 7. Global Collaboratorc. Contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal

### Common Core Standards Addressed

CCSS.ELA-Literacy.CCRA.W.3 Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details and well-structured event sequences.
CCSS.ELA-Literacy.CCRA.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

# **6. Cyber Safety**

 **Learning Objectives**When you have completed this Thing you will:

1. know how to be safe while on the Internet [Digital Citizen]
2. understand online etiquette [Digital Citizen]
3. understand the impact of online bullying [Digital Citizen]

## Quests 1-9

● *Quest 1 - Bill of Rights:* Read the 9 themes of digital citizenship, the 10 rules of netiquette, and 10 online safety tips. Create a Digital Bill of Rights and present to the class.

● *Quest 2 - Danger:* Review the Top 10 Online Safety Tips, watch a video, take an online Internet safety quiz and create an online poster to share with others.

● *Quest 3 - Online Etiquette:* Take an online quiz.

● *Quest 4 - Cyber Spy Game:* Play a cybersafety game, and use a WP program to list at least five online tips to help stay Cyber safe.

● *Quest 5 - ID Faceoff Game:* Play an ID game and take a screenshot of the results.

● *Quest 6 - Six Clicks:* Watch videos about how much information can be found about you or others online and risks of posting online.

● *Quest 7 - Cyberbullying Video:* Watch a video on cyberbullying, take a quiz or complete and activity at the end of the video.

● *Quest 8 - Nobody Likes a Bully:* Review what you have learned about Cyber Safety, select a topics and create a project.

● *Quest 9 - Webonauts:* Play a game and take a screenshot of the results.

**ISTE Standards for Students Addressed**

**2. Digital Citizen**

b. Engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices

c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property

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### Common Core Standards Addressed

CCSS.ELA-Literacy.CCRA.L.6 Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression. CCSS.ELA-Literacy.CCRA.W.2 Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
CCSS.ELA-Literacy.CCRA.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-Literacy.W.6.6, CCSS.ELA-Literacy.W.7.6, 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.

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# **7. Be Legal and Fair**

**Learning Objectives**
When you have completed this Thing you will:

1. know about copyright and fair use [Digital Citizen]
2. understand the social responsibility of using copyrighted materials [Digital Citizen]
3. know how to recognize and avoid plagiarism [Digital Citizen]
4. know how to use creative commons licenses [Digital Citizen]

## Quests 1-4

● *Quest 1 - Copyright Laws:* Visit 2 websites, watch 2 videos and answer questions in WP document about copyright laws. Create a digital artifact and take a copyright quiz.

● *Quest 2 - The Source:* Find a poem and an image, learn how to cite both, put them together on the same page and cite the source.

● *Quest 3- Plagiarism:* Check your classwork to ensure it is original and not plagiarized

● *Quest 4 - Stop the Pirates:* Watch 2 videos and create a poster discouraging others from illegally downloading and reproducing content. Use CreativeCommons.org to create a license.

## ISTE Standards for Students Addressed

## 2. Digital Citizen

## b. Engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devicesc. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property

##

**Common Core Standards**
CCSS.ELA-Literacy.CCRA.SL.5 Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
CCSS.ELA-Literacy.CCRA.W.3 Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details and well-structured event sequences.
CCSS.ELA-Literacy.CCRA.W.7 Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

 CCSS.ELA-Literacy.CCRA.W.8 Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

**8. Troubleshooting**

**Learning Objectives**When you have completed this Thing you will:

1. know how to troubleshoot computer problems [Computational Thinker & Empowered Learner]
2. understand basic computer and network troubleshooting [Empowered Learner]
3. be able to troubleshoot my computer [Empowered Learner]

## Quests 1-4

* *Quest 1* - *Murphy’s Law:* Watch videos on computer troubleshooting, take notes and create a flowchart.
* *Quest 2* - *Now What?:* Solve 3 computer problems with solutions illustrated in flowcharts.
* *Quest 3* - *Safe?:* Research shopping safely online, and learn more about spyware and antivirus software.
* *Quest 4 - Trouble:* Create a troubleshooting tips page on a web presence.
* *Gold Quest - Challenge: Robots! -* Take on the role of an engineer at RoboWorks, a robotics factory, and solve real-world problems on land, sea or in the air.

## ISTE Standards for Students Addressed

1. Empowered Learner
a. Articulate and set personal learning goals, developing strategies leveraging technology to achieve them, and reflect on the learning process itself to improve learning outcomes
c. Use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways
d. Understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies, are able to transfer their knowledge to explore emerging technologies

5. Computational Thinker
c. Break problems into component parts, extract key information and develop descriptive models to understand complex systems or facilitate problem solving

## Common Core Standards Addressed

CCSS.ELA-Literacy.CCRA.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-Literacy.CCRA.W.5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
CCSS.ELA-Literacy.CCRA.W.7 Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

**9. Search Strategies**

**Learning Objectives
When you have completed this Thing you will:**

1. know how to search for and evaluate information [Knowledge Constructor]
2. know the best tools for doing research [Knowledge Constructor]
3. know how to search safely [Knowledge Constructor]
4. be able to properly cite resources [Knowledge Constructor]

## Quests 1-4

* *Quest 1 -Introduction to the Michigan eLibrary:* Watch a video on MEL and Boolean Logic, use a WP document to research and answer questions from MEL, define some words and add an image to the document from the SIRS Discoverer.
* *Quest 2 - Learn how to Safely Search the Internet:* Learn about safe searching for students. Students will search for the answers to various questions.
* *Quest 3 - Website Evaluation:* Review what databases and search engines are, learn how to evaluate a website using the CARRDSS system. Answer questions in a WP document and use a form to evaluate a website.
* *Quest 4 - Citing your Source:* Answer questions on Benjamin Franklin (document provided). Use Mel.org or Google and boolean logic. Learn to use citation makers to cite sources for answers.
* *Quest 5 - Fake or Real*: Do you know which sites are reporting the truth? Can you tell the difference between real and fake information?

**ISTE Standards for Students Addressed**

1. Empowered Learner

a. Articulate and set personal learning goals, develop strategies leveraging technology to achieve them, and reflect on the learning process itself to improve learning outcomes

d. Understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies, are able to transfer their knowledge to explore emerging technologies

3. Knowledge Constructor

a. Plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits

b. Evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources

c. Curate information from digital resources using a variety of tools and methods to create collections of artifacts or solving authentic problems

d. Build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions

5. Computational Thinker

b. Collect data or identify relevant data sets

### Common Core Standards Addressed

CCSS.ELA-Literacy.CCRA.W.2 Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
CCSS.ELA-Literacy.CCRA.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience
CCSS.ELA-Literacy.CCRA.W.7 Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation
CCSS.ELA-Literacy.CCRA.W.8 Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

**10. Digital Images**

**Learning Objectives**
When you have completed this Thing you will:

1. know how to locate and use digital images appropriately [Digital Citizen]
2. understand that digital images can be edited and resized using online resources [Empowered Learner]
3. understand how selfies can impact my digital identity [Digital Citizen]
4. know how to represent myself appropriately online [Creative Communicator]

## Quests 1-4

* *Quest 1 - The Search is on!:* This Quest will guide the student through the basics of searching for digital images that are legal and fair for him/her to use in presentations and on web pages.
* *Quest 2 - Image Magic:* Learn how to use PicMonkey to edit, cite, create Creative Commons license and resize the image from Quest 1. Also create a web banner with text.
* *Quest 3 - Digital Self Portrait:* Create a selfie or photo to create a digital media self portrait (a "selfie poster").
* *Gold Quests - The Science Mythbusters:* Produce a multimedia project that will help bust a science myth or confirm a science truth.

## ISTE Standards for Students Addressed

1. Empowered Learner
d. Understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies, are able to transfer their knowledge to explore emerging technologies

2. Digital Citizen
c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property

6. Creative Communicator
a. Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication

**Common Core Standards Addressed**

CCSS.ELA-Literacy.CCRA.W.8 Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
CCSS.ELA-Literacy.CCRA.W.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.
CCSS.ELA-Literacy.CCRA.SL.2 Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
CCSS.ELA-Literacy.CCRA.SL.5 Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

**11. Powerful Presentations**

**Learning Objectives**

When you have completed this Thing you will:

1. know how to use online presentation tools [Empowered Learner]
2. understand the features and attributes of effective presentations [Creative Communicator]
3. know how to use a variety of media to create and collaborate on an effective presentation [Global Collaborator]

## Quests 1-2

## *Quest 1 - Collaboration:* Use a Visual Organizer, to get ready to create a shared presentation. Plan and teamwork the first steps.

## *Quest 2 - Basics:* The team will learn how to create a dynamic presentation and how to set it up.

* *Quests QGS1- QGS6 and QM1- QM6*: Collaborate and create a Google Drive Presentation or Microsoft PowerPoint Online Presentation defining the world in which you live; your school, city, state, region, country, continent, planet, and galaxy. Insert Objects into the presentation, format, edit, arrange objects, and share the final presentation.

Gold Quests

* *Quest 1 - The Land of Prezi:* Explore Prezi, view some Prezi’s, create a Prezi account and watch 3 introduction Prezi videos.
* *Quest 2 - Powerful Prezis:* View one Prezi for tips for creating a Prezi. View two more Prezis and identify the strengths and weaknesses of each of them.
* *Quest 3 - Creating your Prezi:* Create a presentation about yourself, using a template.

## ISTE Standards for Students Addressed

1. Empowered Learner
a. Articulate and set personal learning goals, develop strategies leveraging technology to achieve them, and reflect on the learning process itself to improve learning outcomes
c. Use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways
d. Understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies, are able to transfer their knowledge to explore emerging technologies

6. Creative Communicator
a. Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication
c. Communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations
d. Publish or present content that customizes the message and medium for a variety of audiences

7. Global Communicator
b. With guidance from an educator, students use technology tools to work with friends and with people outside their neighborhood, city and beyond
c. Contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal

## Common Core Standards Addressed

CCSS.ELA-Literacy.CCRA.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-Literacy.CCRA.W.5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
CCSS.ELA-Literacy.CCRA.W.7 Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
CCSS.ELA-Literacy.CCRA.W.8 Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
CCSS.ELA-Literacy.CCRA.W.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.

**12. Interactives**

**Learning Objectives**

When you have completed this Thing you will:

1. know about interactive websites and resources [Empowered Learner]
2. understand the different types of interactive learning [Empowered Learner]
3. understand how to use geographical information [Computational Thinker]

## Quests 1-3

● *Quest 1 - Charting your Course:* Learn to use Google Maps, find directions of your route home from school, and take a screenshot of results. Find your "absolute location" and your "relative location".

● *Quest 2 - Interactive Investigations:* Use Library of National Manipulatives and Edheads- Science and Math Interactives to complete manipulatives and create your own maze. Experience more interactives. Review three learning web sites and write about one of them.

● *Quest 3 – Interactive Study Tools:* Watch a video on how to use Quizlet. Find Quizlet cards for topic you are studying in school and use different Quizlet options. Try out the Vocabulary Spelling City website. Try out the Khan Academy to experience a video tutorial. Learn how Wolfram Alpha can help you solve math and other problems. Experience the use of a Text Summarization Tool and learn about Highlighting, Clipping, Annotating and Sticky Notes tools. When done, add information to your webspace.

##  ISTE Standards for Students addressed

1. Empowered Learner
a. Articulate and set personal learning goals, develop strategies leveraging technology to achieve them, and reflect on the learning process itself to improve learning outcomes
c. Use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways
d. Understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies, are able to transfer their knowledge to explore emerging technologies

5. Computational Thinker
c. Break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving

**Common Core Standards Addressed**

CCSS.ELA-Literacy.CCRA.L.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.
CCSS.ELA-Literacy.CCRA.L.6 Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term 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.
CCSS.ELA-Literacy.RST.6-8.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.
CCSS.ELA-Literacy.RST.6-8.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table)

CCSS.Math.Content.6.NS.C.6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates
CCSS.Math.Practice.MP4 Model with mathematics.

**13. Dig the Data**

**Learning Objectives**
When you have completed this Thing you will:

1. know how to analyze data and create different visual representations [Computational Thinker, Creative Communicator]
2. understand how spreadsheets, charts and visual representations can help organize, evaluate, and present data [Knowledge Constructor]
3. know different ways of organizing and sharing abstract representations of data [Creative Communicator]

## Quests 1-10

● *Quests 1-5 - Party Planner:* Learn spreadsheet basics and use a spreadsheet to plan party. Use formulas, formatting, charts and sharing.

● *Quest 6 - Spin Out:* Use the spinner website and spreadsheet template to register spinner results. Save the spinner and spreadsheet document and create short presentation about what was learned.

● *Quest 7 - Just Function (Fx):* Learn to use functions, complete a sample spreadsheet and answer questions in a WP document.

● *Quest 8 - Whiskers:* Learn how to use box and whiskers plots, create a box and whiskers plot, answer questions in a WP document, make a recommendation and pitch to the class.

● *Quest 9 - Changes over time:* Collect data and create a graph for either Lemonade or Coffee company. Screenshot results and answer questions in WP document.

 ● *Quest 10 - Sort it Out: Y*ou are going to manage the music for the DJ before the party begins. Your job is to sort the music in several ways and create a playlist.

##

**ISTE Standards for Standards Addressed**

3. Knowledge Constructor
c. Curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions

5. Computational Thinker
a. Formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions
b. Collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision making.
c. Break problems into component parts, extract key information
d. Publish or present content that customizes the message and medium for their intended audiences

6. Creative Communicator
a. Create original works or responsibly repurpose or remix digital resources into new creations
b. Communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations

c. Communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations

d. Publish or present content that customizes the message and medium for a variety of audiences

### Common Core Standards

CCSS.ELA-Literacy.CCRA.L.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
CCSS.ELA-Literacy.CCRA.L.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
CCSS.ELA-Literacy.CCRA.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-Literacy.CCRA.W.7 Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
CCSS.ELA-Literacy.CCRA.R.7 Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
CCSS.M.6.SP.4
Summarize and describe distributions.
CCSS.M.6.SP.5a
Summarize numerical data sets
CCSS.M.7.SP.6 & CCSS.M.7.SP.7a, 7b Investigate chance processes and develop, use and evaluate probability models
CCSS.MP2 Reason abstractly and quantitatively
CCSS.MP3
Construct viable arguments and critique the reasoning of others
CCSS.Math.Content.5.MD, .B, B2 Measurement and Data. Create a line plot to display a data set…
CCSS.Math.Content.6.SP, A, A3, AB, B5, B5c Statistics and Probability. Develop understanding of statistical variability.
CCSS MP3 Construct viable arguments and critique the reasoning of others
CCSS MP4. Model with Mathematicc
CCSS.MP5
Use appropriate tools strategically

14. Social Networking

**Learning Objectives**When you have completed this Thing you will:​

1. know what a social network is [Empowered Learner]
2. understand why it is important to manage your digital identity when using a social network [Digital Citizen]
3. understand why it is important to navigate social networks safely and post thoughtfully [Digital Citizen]
4. be able to create a set of personal guidelines for navigating social networks [Digital Citizen]

## Quests 1-4

● *Quest 1 - Life Online, an exploration:* examine your online habits to get a picture of your life online

● *Quest 2 - Social Networks in Society:* View a video, read an article, and review a series of tweets. Review the Rules of the Road for Kids. Demonstrate an understanding of digital citizenship. Complete a job rejection letter to illustrate the consequences of inappropriate tweeting.

● *Quest 3 - Consider This:* Think before you post by sharing the consequences of poor online decisions.

● *Quest 4 - Safe and Smart:* Produce your own Social networking contract with guidelines that you can share with parents and other students.

**ISTE Standards for Students Addressed**

1. Empowered Learner

a. Articulate and set personal learning goals when appropriate and to make choices on how to meet them, develop strategies using technology to achieve them and reflect on the learning process.
b. Students build networks by making online connections with other learners
d. Understand the fundamental concepts (basics) of technology
d. Understand the fundamental concepts (basics) of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies

2. Digital Citizen
a. Cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world
b. Engage in positive, safe, legal and ethical behavior when using technology
c. manage their personal data to maintain digital privacy and security

###

### Common Core Standards Addressed

CCSS.ELA-Literacy.CCRA.L.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
CCSS.ELA-Literacy.CCRA.L.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
CCSS.ELA-Literacy.CCRA.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

**15. Design Thinking**

**Learning Objectives**
When you have completed this Thing you will:

1. be able to use research skills to understand real-world problems and develop ideas to solve them [Innovative Designer, Knowledge Constructor]
2. know how to use a design process to solve a problem [Innovative Designer]
3. be able to create and test prototypes to improve on a design [Innovative Designer]
4. be able to choose appropriate tools to organize and manage a process with team members [Innovative Designer, Global Collaborator]
5. be able to choose appropriate tools to share my ideas with a target audience [Innovative Designer, Creative Communicator]

## Quests 1-6

* *Quest 1 - What is Design Thinking:* Learn about design thinking processes and how you can use them to solve problems. You’ll assemble a diverse team and determine how you’ll collaboratively manage your design thinking process.
* *Quest 2 - What's Your Problem?:* Use your observation skills to discover real-world problems affecting people in your community. You’ll develop an understanding by empathizing with people on all sides of the issue affected by your problem. Lastly, you’ll define why it’s important to solve your problem.
* *Quest 3 - Big Ideas:* Brainstorm lots of ideas that might solve your problem. Research what other people have tried and build upon the ideas of others to come up with your best idea.
* *Quest 4- Prototypes:* Select the materials you need to create a model for your idea. You’ll use this model to show the important features and ideas behind your creation and how it solves your problem.
* Quest 5- *Test & Improve*: Put your prototype to the test. You’ll team up with another team to gather feedback and improve upon your design.
* Quest 6 - *Reflect & Share*: Take a moment to reflect on what you’ve created and what you’ve learned. You’ll also develop a short presentation to raise awareness for your problem, share your solution and persuade others to join your cause.

## ISTE Standards for Students Addressed1. Empowered Learnerb. build networks and customize their learning environments in ways that support the learning process.

3. Knowledge Constructor
a.plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.
d. build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.

4. Innovative Designera.know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.
b. select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.
c. develop, test and refine prototypes as part of a cyclical design process.

6. Creative Communicator
​​​a. choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.
c. communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.
d. publish or present content that customizes the message and medium for their intended audiences.

7. Global Collaborator
b. use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.
c. contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.
d. explore local and global issues and use collaborative technologies to work with others to investigate solutions.

##

**Common Core Standards Addressed**

**16. Career Prep**

**Learning Objectives**

When you have completed this Thing you will:

1. know how to make everyday living choices [Knowledge Constructor]
2. understand how decisions I make can affect my future [Knowledge Constructor]
3. understand how to create a multimedia portfolio that promotes myself [Creative Communicator]

## Quests 1-6

● *Quest 1 - Game of Life:* Play a decision-making game and take a screenshot of the results.

● *Quest 2 - Who are you?:* Record information about yourself in a downloaded "WhoAmI" document. Take a personality quiz and record the result. Create a graphic illustration, also within the document.

● *Quest 3 - Explore Career Match:* Take a Career survey, research your career cluster, research your career outlook, compare your top three careers, then create and share the results in a multi-media presentation.

● *Quest 4 - Promote Yourself:* Learn about and create a resume, an application, and a an education plan

● *Quest 5 - Create a Digital Portfolio:* Learn about and create a digital portfolio, and update your web presence.

● *Quest 6 - Branding Yourself:* Review some video resumes and create a video resume.

## ISTE Standards for Students Addressed

## 3. Knowledge Constructora. Plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuitsc. Curate information from digital resources using a variety of tools and methods to create collections or artifacts that demonstrate meaningful connections or conclusionsd. Build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions

## 6. Creative Communicatorc. Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.

### Common Core Standards Addressed

CCSS.ELA-Literacy.CCRA.R.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
CCSS.ELA-Literacy.CCRA.R.7 Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.1
CCSS.ELA-Literacy.CCRA.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-Literacy.CCRA.W.5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
CCSS.ELA-Literacy.CCRA.W.6 Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.
CCSS.ELA-Literacy.CCRA.W.8 Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
CCSS.ELA-Literacy.CCRA.L.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
CCSS.ELA-Literacy.CCRA.L.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
CCSS.ELA-Literacy.CCRA.L.6 Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.

**17. Creative Communications**

**Learning Objectives**
When you have completed this Thing you will:​

1. know how to use different media tools to communicate complex ideas clearly and effectively [Creative Communicator]
2. be aware of advantages and disadvantages of different media tools [Creative Communicator]
3. know how to select an appropriate technology tool to meet different types of communication [Creative Communicator, Knowledge Constructor]
4. understand how to use and remix several different technology tools responsibly to
5. communicate information [Empowered Learner, Creative Communicator]
be able to use a design process to plan and create digital artifacts [Innovative Designer]

## Quests 1-4 + Gold

* *Quest 1 - Applications: You will explore and analyze different software applications*
* *Quest 2 - Main Idea: You will be using a planning process*
* *Quest 3 - Creating Your Digital Artifact: You will create your digital artifacts*
* *Quest 4 - Remix: You will blend your work for a new purpose*
* *Gold - What is the Message?*

**ISTE Standards for Students Addressed**
1. Empowered Learner

d. Understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies, are able to transfer their knowledge to explore emerging technologies

5. Computational Thinker
c. Break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving

6. Creative Communicator
a. Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.
b. Students create original works or responsibly repurpose or remix digital resources into new creations.
c. Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.
c. Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.

### Common Core Standards Addressed

CCSS.ELA-Literacy.CCRA.R.7 Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
CCSS.ELA-Literacy.CCRA.R.10 Read and comprehend complex literary and informational texts independently and proficiently.
CCSS.ELA-Literacy.CCRA.SL.2 Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
CCSS.ELA-Literacy.CCRA.SL.4 Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
CCSS.ELA-Literacy.CCRA.SL.5 Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
CCSS.ELA-Literacy.CCRA.SL.6 Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

**18. Digital Storytelling**

**Learning Objectives**
When you have completed this Thing you will:

* know and use a process for creating a digital story [Innovative Designer]
* be able to select and use appropriate digital tool(s) [Digital Citizen, Empowered learner]
* understand how to use a Storyboard to build and organize your story elements [Computational Thinker]
* participate in constructive peer feedback to improve the end product to be shared [Creative Communicator]
* create an original story with different media elements [Knowledge Constructor]

## Quests 1-5 + Gold

* *Quest 1 - Process:* In this Quest you will explore the elements of a digital story and the story planning process as you go through a five step process to produce your own story.
* *Quest 2 - Find Your Story:* First you will review the criteria for your digital story by discussing the rubric with your teacher. Then you will brainstorm some story possibilities, receive teacher feedback, and share your final story idea with a group of peers.
* *Quest 3 - Craft Your Story:* Your task is to write your script, get feedback and suggestions, revise it as needed, and be ready for the process of adding the media elements in the next Quest.
* *Quest 4 - Gather Media:* Now it's time to gather and/or create the media elements.
* *Quest 5 - Finalize it!:* The goal of this Quest is for you to use your Storyboard content to create a digital story that you can save and share.
* *Gold Quest - PSA:* Explore Public Service Announcements as a persuasive Digital Story
* *Gold Quest - PSA Creation* : Planning and Creating a Digital Story

**ISTE Standards for Students Addressed**
3. Knowledge Constructor

a. Plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits

4. Innovative Designer

a. Know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems

6. Creative Communicator

a. Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication

b. Create original works or responsibly repurpose or remix digital resources into new creations

d. Publish or present content that customizes the message and medium for their intended audiences

**Common Core Standards Addressed**

CCSS.ELA-Literacy.CCRA.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

CCSS.ELA-Literacy.CCRA.W.5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

CCSS.ELA-Literacy.CCRA.W.7 Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

**19. Buyer Beware**

**Learning Objectives**
When you have completed this Thing you will:

* know how to research and compare products [Computational Thinker]
* know how to protect myself as an online consumer [Digital Citizen]
* be able to protect myself from deceptive advertising, scams and rip-offs [Digital Citizen]

**Quests 1-4**

* *Quest 1 - Compare Products:* Learn about evaluating and comparing product features and costs.
* *Quest 2 - Truth in Advertising:* Visit four stores in a virtual mall to experience: ads and endorsements, targeted marketing, false and misleading ads, and advertising claims. Learn about making good choices when making a purchase.
* *Quest 3* - *Scams*: Learn about four different common scams. Learn how to protect yourself, family, friends, and pets.
* Quest 4 - Clickbait: How many times have you fallen for a pop-up advertisement or an eye catching link that prompts you to read on? This is called **clickbait** and it is often paid for by the advertiser or generates income based on the number of clicks. The content is often not true, but more of a **bait and hook** for people browsing the Internet.

## ISTE Standards for Students Addressed2. Digital Citizena. Cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital worldb. Engage in positive, safe, legal and ethical behavior when using technology

5. Computational Thinker

b. Collect data or identify relevant data sets

##

### Common Core Standards Addressed

CCSS.ELA-Literacy.CCRA.R.7 Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.1

CCSS.ELA-Literacy.CCRA.R.8 Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.

CCSS.ELA-Literacy.CCRA.W.7 Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

CCSS.ELA-Literacy.CCRA.W.8 Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

CCSS.ELA-Literacy.CCRA.W.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.

CCSS.ELA-Literacy.CCRA.SL.2 Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

Presentation of Knowledge and Ideas

CCSS.ELA-Literacy.CCRA.SL.5 Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Common Core Math Standards

MP 3, 4, 5

**20. Mobile Computing**

**Learning Objectives**
When you have completed this Thing you will:​

1. know how to use cell phones in a safe, legal, and appropriate way [Digital Citizen]
2. know how to manage my digital identity and reputation through the appropriate use of mobile devices [Digital Citizen]
3. be able to create my own cell phone application [Innovative Designer]

**Quests 1-4**

● *Quest 1 - Texting:* Watch a video about the dangers of texting, answer questions when done.

● *Quest 2 - Emoticons:* Read an article and visit a webpage about emoticons, create a 2x11 table describing the meaning of 10 emoticons.

● *Quest 3 - TMI:* Watch 2 videos about sharing information and answer the questions provided.

● *Quest 4 - App Creator:* Learn about AppBuilder and use it to create an app.

## ISTE Standards for Students addressed

2. Digital Citizen

a. Cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world

b. Engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices

d. Manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online

4. Innovative Designer

a. know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems

c. develop, test and refine prototypes as part of a cyclical design process

**21. Coding and Game Design**

**Learning Objectives**

When you have completed this Thing you will:

1. know why programming and invention are important in our lives [Computational Thinker]
2. understand the basics of online game design [Innovative Designer]
3. know how to use coding to automate a task [Computational Thinker]
4. understand computational design by applying technology to a problem [Innovative Designer]

## Quests 1-5

* *Quest 1 - Get Inspired*: Learn about the stories of modern day innovators who are changing the world through their use of coding and programming. Time for you to get inspired!
* *Quest 2- Gamestar Mechanic*: In this Quest, you will not only play games, but learn how to build them and troubleshoot them. The critical thinking skills you will use will teach you a lot about problem solving!
* *Quest 3- Coding.org:* You are going to go to the code.org site and begin a coding project
* *Quest 4* *- Sphero*: This is a Quest with a subset of several classroom activities. These require the use of the [Sphero SPRK + Robotic](http://www.sphero.com/sphero) Ball.
* *Quest 5 - Ozobot*: This is a Quest with a subset of several classroom activities. These require the use of Ozobots.

## ISTE Standards for Students Addressed

4. Innovative Designer
a. know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems
c. develop, test and refine prototypes as part of a cyclical design process

5. Computational Thinker
b. collect data or identify relevant data sets
d. understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions

## Common Core Standards Addressed

[CCSS.ELA-Literacy.CCRA.W.9](http://www.corestandards.org/ELA-Literacy/CCRA/W/9/) Draw evidence from literary or informational texts to support analysis, reflection, and research