

<b>Grade, Subject/Course:</b> 1st Grade, Technology		
<b>Unit:</b> Computational Thinker	<input checked="" type="checkbox"/> <b>Essential</b>	<input type="checkbox"/> <b>Important</b>
<b>Big Idea:</b>  <i>Solve It!</i> How can I construct code to complete a task?	<input type="checkbox"/> <b>Compact</b>	
<b>PA Core Content Standards/Anchors (or National Standards):</b>		
<b>PA STEELS (Science, Technology &amp; Engineering, and Environmental Literacy &amp; Sustainability) Standards:</b>		
<ul style="list-style-type: none"> <li>3.5.K-2.A: Identify and use everyday symbols.</li> <li>3.5.K-2.F: Investigate the use of technology in the home and community.</li> <li>3.5.K-S.W: Apply concepts and skills from technology and engineering activities that reinforce concepts and skills across multiple content areas.</li> <li>3.5.K-2.AA: Demonstrate that creating can be done by anyone.</li> </ul>		
<b>PA Academic Standards for BCIT (Business, Computer, and Information Technology):</b>		
<ul style="list-style-type: none"> <li>15.3.2.J: Reproduce active listening techniques modeled by familiar adults.</li> <li>15.3.2.N: Identify positive work habits in the classroom.</li> <li>15.4.2.B: Demonstrate responsible use of technology and equipment.</li> <li>15.4.2.G: With help and support, select and use various software/applications for an intended purpose.</li> <li>15.4.2.M: With help and support, identify various technologies used in the workplace.</li> </ul>		
<b>CSTA (Computer Science Teachers Association) Standards:</b>		
<ul style="list-style-type: none"> <li>1A-CS-01: Select and operate appropriate software to perform a variety of tasks, and recognize that users have different needs and preferences for the technology they use.</li> <li>1A-AP-08: Model daily processes by creating and following algorithms (sets of step-by-step instructions) to complete tasks.</li> <li>1A-AP-09: Model the way programs store and manipulate data by using numbers or other symbols to represent information.</li> <li>1A-AP-10: Develop programs with sequences and simple loops, to express ideas or address a problem.</li> <li>1A-AP-11: Decompose (break down) the steps needed to solve a problem in a precise sequence of instructions.</li> <li>1A-AP-12: Develop plans that describe a program’s sequence of events, goals, and expected outcomes.</li> <li>1A-AP-14: Debug (identify and fix) errors in an algorithm or program that includes sequences and simple loops.</li> </ul>		
<b>ISTE (International Society for Technology in Education) Standards for Students:</b>		
<ul style="list-style-type: none"> <li>Computational Thinker: Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.</li> </ul>		
<b>Interdisciplinary Standards (if applicable):</b>		
<b>PA Core Standards for ELA (English Language Arts):</b>		
<ul style="list-style-type: none"> <li>ELA CC.1.2.1.F: Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.</li> <li>ELA CC.1.2.1.J: Use words and phrases acquired through conversations, reading, and being read to, and responding to texts, including words that signal connections and relationships between the words and phrases.</li> </ul>		

- ELA CC.1.5.1.A: Participate in collaborative conversations with peers and adults in small and larger groups.
- ELA CC.1.5.1.B: Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
- ELA CC.1.5.1.C: Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.
- ELA CC.1.5.1.E: Produce complete sentences when appropriate to task and situation
- ELA CC.1.5.1.G: Demonstrate command of the conventional of standard English when speaking based on Grade 1 level and content.

**PA Core Standards for Math:**

- Math CC.2.2.3.A.4: Solve problems involving the four operations, identify and explain patterns in arithmetic. (*3rd Grade standard*)

**Essential Questions:**

- How can I construct code to complete a task?

**Understandings:**

Students will know that . . .

- code can be constructed to complete a puzzle, move an object, and create unique work

**Knowledge:**

- code is the basis of all technology
- problem-solving is necessary to construct and debug code
- robotic devices are controlled by code and make tasks easier

**Do/Skills:**

Students will be able to...

- choose and place commands to construct an algorithm
- use trial and error as needed to construct and debug code
- identify uses of robotic devices in the real world

**Vocabulary:**

- *code* - the language that programmers create and use to tell a computer what to do
- *algorithm* - a list of steps to finish a task
- *program* - an algorithm that has been coded into something that can be run by a machine
- *programming* - the art of creating a program, another word for writing code
- *persistence* - trying again and again even when something is very hard
- *sequence* - a set of related events, movements, or items that follow each other in a particular order
- *run program* - telling the computer to execute the commands that have been written in a program
- *bug* - an error in a program that prevents the program from running as expected
- *debugging* - finding and fixing problems in an algorithm or program
- *condition* - a statement that consist of an “If and Then” part to create an action dependent on something else (ex. If \_\_\_ is true, then do \_\_\_\_.)
- *loop* - the action of doing something over and over again
- *repeat* - to do something again
- Code.org terms:

**Core Resources:**

- device (ex. Chromebook)
- digital learning platform (ex. Clever)
- coding programs (ex. Kodable, Code.org )
- Hour of Code event
  - As time and schedules permit, collaboration with community member(s), EAHS coding classes, and the EASD Tech Department

<ul style="list-style-type: none"> <li>○ <i>workspace</i> - the white area on the right side of Code.org's online learning system where the user drags and drops commands to build a program</li> <li>○ <i>toolbox</i> - the tall gray bar in the middle section of Code.org's online learning system that contains all of the commands used to write a program</li> <li>○ <i>block-based coding</i> - any programming language that lets users create programs by manipulating “blocks” or graphical programming elements rather than writing code using text (Examples include Code Studio, Scratch, Blockly, and Swift. Sometimes called visual coding, drag and drop programming, or graphical programming blocks.)</li> <li>○ <i>Blockly</i> - the visual programming language used in Code.org's online learning system for K-5 students</li> </ul>	
<p><b><u>Common Assessment(s):</u></b></p> <ul style="list-style-type: none"> <li>● Students demonstrate progress with their coding skills through the completion of coding courses (ex. Kodable and Course A in Code.org).</li> </ul>	<p><b><u>Supplemental Resources:</u></b></p>

<b>Grade, Subject/Course:</b> 1st Grade, Technology	
<b>Unit:</b> Creative Communicator	_____ Essential <u>  X  </u> Important      _____ Compact
<b>Big Idea:</b>  <i>Share It!</i> How can I use digital tools to communicate with others?	
<p><b><u>PA Core Content Standards/Anchors (or National Standards):</u></b></p> <p><b><u>PA STEELS (Science, Technology &amp; Engineering, and Environmental Literacy &amp; Sustainability) Standards:</u></b></p> <ul style="list-style-type: none"> <li>● 3.5.K-2.C: Explain ways that technology helps with everyday tasks.</li> </ul> <p><b><u>PA Academic Standards for BCIT (Business, Computer, and Information Technology):</u></b></p> <ul style="list-style-type: none"> <li>● 15.3.2.J: Reproduce active listening techniques modeled by familiar adults.</li> <li>● 15.3.2.M: With prompting and support, demonstrate proper etiquette while using technology.</li> <li>● 15.3.2.N: Identify positive work habits in the classroom.</li> <li>● 15.3.2.O: With prompting and support, ask and answer questions about various communication strategies used in diverse settings (classroom, home, or social event).</li> <li>● 15.3.2.S: With prompting and support, ask and answer questions about electronic communication.</li> <li>● 15.3.2.T: With prompting and support, answer questions related to digital citizenship.</li> <li>● 15.4.2.B: Demonstrate responsible use of technology and equipment.</li> <li>● 15.4.2.G: With help and support, select and use various software/applications for an intended purpose.</li> <li>● 15.4.2.M: With help and support, identify various technologies used in the workplace.</li> </ul> <p><i>*These standards are covered in Chapter 339 and ELA curriculum.</i></p> <ul style="list-style-type: none"> <li>● 15.3.2.K: Reference student Interpersonal Skills 16.3.K.B</li> <li>● 15.3.2.X: Reference Student Interpersonal Skills 16.2.K.B</li> </ul> <p><b><u>CSTA (Computer Science Teachers Association) Standards:</u></b></p> <ul style="list-style-type: none"> <li>● 1A-CS-01: Select and operate appropriate software to perform a variety of tasks, and recognize that users have different needs and preferences for the technology they use.</li> <li>● 1A-IC-17: Work respectfully and responsibly with others online.</li> </ul> <p><b><u>ISTE (International Society for Technology in Education) Standards for Students:</u></b></p> <ul style="list-style-type: none"> <li>● Creative Communicator: Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats, and digital media appropriate to their goals.</li> </ul>	
<p><b><u>Interdisciplinary Standards (if applicable):</u></b></p> <p><b><u>PA Core Standards for ELA (English Language Arts):</u></b></p> <ul style="list-style-type: none"> <li>● ELA CC.1.2.1.F: Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.</li> <li>● ELA CC.1.2.1.J: Use words and phrases acquired through conversations, reading, and being read to, and responding to texts, including words that signal connections and relationships between the words and phrases.</li> <li>● ELA CC.1.4.1.F: Demonstrate a grade-appropriate command of the conventions of standard English grammar, usage, capitalization, punctuation, and spelling.</li> </ul>	

<ul style="list-style-type: none"> <li>● ELA CC.1.4.1.U: With guidance and support use a variety of digital tools to produce and publish writing including in collaboration with peers.</li> <li>● ELA CC.1.5.1.A: Participate in collaborative conversations with peers and adults in small and larger groups.</li> <li>● ELA CC.1.5.1.B: Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.</li> <li>● ELA CC.1.5.1.C: Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.</li> <li>● ELA CC.1.5.1.E: Produce complete sentences when appropriate to task and situation</li> <li>● ELA CC.1.5.1.G: Demonstrate command of the conventional of standard English when speaking based on Grade 1 level and content.</li> </ul>	
<p><b><u>Essential Questions:</u></b></p> <ul style="list-style-type: none"> <li>● How can I use digital tools to communicate with others?</li> </ul>	<p><b><u>Understandings:</u></b></p> <p>Students will know that . . .</p> <ul style="list-style-type: none"> <li>● there are various options for communicating through digital tools</li> </ul>
<p><b><u>Knowledge:</u></b></p> <ul style="list-style-type: none"> <li>● digital tools can improve communication and increase connectivity</li> <li>● original digital works can be created and shared through the use of technology</li> </ul>	<p><b><u>Do/Skills:</u></b></p> <p>Students will be able to...</p> <ul style="list-style-type: none"> <li>● use digital tools to communicate with others</li> <li>● create and share original digital works through the use of technology</li> </ul>
<p><b><u>Vocabulary:</u></b></p> <ul style="list-style-type: none"> <li>● <i>communication</i> - the act of giving, receiving, and sharing information</li> <li>● <i>share</i> - procedure of creating and sending a link that contains digital work for others to view</li> <li>● <i>digital tools</i> - online learning tools like websites, programs, or applications that can be accessed via the internet and used to collaborate and share with others</li> <li>● <i>digital citizen</i> - someone who acts safely, responsibly, and respectfully online</li> </ul>	<p><b><u>Core Resources:</u></b></p> <ul style="list-style-type: none"> <li>● device (ex. Chromebook)</li> <li>● digital learning platform (ex. Clever)</li> <li>● learning management system (ex. Seesaw)</li> <li>● productivity software (ex. Google Workspace for Education: Google Slides, Google Forms)</li> </ul>
<p><b><u>Common Assessment(s):</u></b></p> <ul style="list-style-type: none"> <li>● Students share productivity software projects (ex. Google Slides) through a learning management system (ex. Seesaw).</li> </ul>	<p><b><u>Supplemental Resources:</u></b></p>

<b>Grade, Subject/Course:</b> 1st Grade, Technology	
<b>Unit:</b> Digital Citizen	<u>  X  </u> Essential <u>      </u> Important <u>      </u> Compact
<p><b>Big Idea:</b></p> <p><i>Protect It!</i> How can I be a good digital citizen who uses technology correctly and responsibly?</p>	
<p><b><u>PA Core Content Standards/Anchors (or National Standards):</u></b></p> <p><b><u>PA STEELS (Science, Technology &amp; Engineering, and Environmental Literacy &amp; Sustainability) Standards:</u></b></p> <ul style="list-style-type: none"> <li>● 3.5.K-2.E: Illustrate helpful and harmful effects of technology.</li> <li>● 3.5.K-2.R: Draw connections between technology and human experiences.</li> </ul> <p><b><u>PA Academic Standards for BCIT (Business, Computer, and Information Technology):</u></b></p> <ul style="list-style-type: none"> <li>● 15.3.2.J: Reproduce active listening techniques modeled by familiar adults.</li> <li>● 15.3.2.L: Identify role models in various contexts (real vs. fiction).</li> <li>● 15.3.2.M: With prompting and support, demonstrate proper digital etiquette while using technology.</li> <li>● 15.3.2.N: Identify positive work habits in the classroom.</li> <li>● 15.3.2.O: With prompting and support, ask and answer questions about various communication strategies used in diverse settings (classroom, home or social event).</li> <li>● 15.3.2.S: With prompting and support, ask and answer questions about electronic communication.</li> <li>● 15.3.2.T: With prompting and support, answer questions related to digital citizenship.</li> <li>● 15.4.2.B: Demonstrate responsible use of technology and equipment.</li> </ul> <p><b><u>CSTA (Computer Science Teachers Association) Standards:</u></b></p> <ul style="list-style-type: none"> <li>● 1A-NI-04: Explain what passwords are and why we use them, and use strong passwords to protect devices and information from unauthorized access.</li> <li>● 1A-IC-17: Work respectfully and responsibly with others online.</li> <li>● 1A-IC-18: Keep login information private, and log off of devices appropriately.</li> </ul> <p><b><u>ISTE (International Society for Technology in Education) Standards for Students:</u></b></p> <ul style="list-style-type: none"> <li>● Digital Citizen: Students recognize the rights, responsibilities and opportunities of living, learning, and working in an interconnected digital world, and they act and model in ways that are safe, legal, and ethical.</li> </ul>	
<p><b><u>Interdisciplinary Standards (if applicable):</u></b></p> <p><b><u>PA Core Standards for ELA (English Language Arts):</u></b></p> <ul style="list-style-type: none"> <li>● ELA CC.1.2.1.F: Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.</li> <li>● ELA CC.1.2.1.J: Use words and phrases acquired through conversations, reading, and being read to, and responding to texts, including words that signal connections and relationships between the words and phrases.</li> <li>● ELA CC.1.5.1.A: Participate in collaborative conversations with peers and adults in small and larger groups.</li> <li>● ELA CC.1.5.1.B: Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.</li> <li>● ELA CC.1.5.1.C: Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.</li> </ul>	

<ul style="list-style-type: none"> <li>● ELA CC.1.5.1.E: Produce complete sentences when appropriate to task and situation</li> <li>● ELA CC.1.5.1.G: Demonstrate command of the conventional of standard English when speaking based on Grade 1 level and content.</li> </ul>	
<p><b><u>Essential Questions:</u></b></p> <ul style="list-style-type: none"> <li>● How can I be a good digital citizen who uses technology correctly and responsibly?</li> </ul>	<p><b><u>Understandings:</u></b></p> <p>Students will know that . . .</p> <ul style="list-style-type: none"> <li>● good digital citizens use apps and websites approved by trusted adults, use their own ideas and words, and keep personal information private</li> </ul>
<p><b><u>Knowledge:</u></b></p> <ul style="list-style-type: none"> <li>● traits of a good digital citizen</li> <li>● ways to stay safe online</li> <li>● characteristics of age appropriate websites</li> <li>● definition of personal information</li> <li>● the importance of taking breaks from technology</li> </ul>	<p><b><u>Do/Skills:</u></b></p> <p>Students will be able to...</p> <ul style="list-style-type: none"> <li>● name traits of a good digital citizen</li> <li>● follow guidelines for safely using the internet</li> <li>● identify age appropriate websites</li> <li>● keep personal information (i.e. name, age, address, passwords) private</li> <li>● name other activities besides technology that they can take part in</li> </ul>
<p><b><u>Vocabulary:</u></b></p> <ul style="list-style-type: none"> <li>● <i>personal information</i> - information that identifies who we are, where we live, and how family, friends, and others can contact us</li> <li>● <i>appropriate</i> - acceptable and proper, follows the rules</li> <li>● <i>digital citizen</i> - someone who acts safely, responsibly, and respectfully online</li> <li>● <i>internet safety</i> - staying safe online and protecting yourself against potential risks on the internet</li> <li>● <i>privacy</i> - keeping personal information to yourself</li> </ul>	<p><b><u>Core Resources:</u></b></p> <ul style="list-style-type: none"> <li>● device (ex. Chromebook)</li> <li>● digital learning platform (ex. Clever)</li> <li>● learning management system (ex. Seesaw)</li> <li>● digital citizenship resources (ex. Common Sense Media, Common Sense Education)</li> </ul>
<p><b><u>Common Assessment(s):</u></b></p> <ul style="list-style-type: none"> <li>● Students identify qualities of a good digital citizen.</li> <li>● Students list the steps to taking a break and “saying goodbye to technology” - <i>Pause, Breathe, Finish Up.</i></li> </ul>	<p><b><u>Supplemental Resources:</u></b></p>

<b>Grade, Subject/Course:</b> 1st Grade, Technology	
<b>Unit:</b> Empowered Learner	<u>  X  </u> Essential <u>      </u> Important <u>      </u> Compact
<b>Big Idea:</b>  <i>Use It!</i> How can I choose, use, and troubleshoot technology to demonstrate my learning?	
<b><u>PA Core Content Standards/Anchors (or National Standards):</u></b>	
<b><u>PA STEELS (Science, Technology &amp; Engineering, and Environmental Literacy &amp; Sustainability) Standards:</u></b>	
<ul style="list-style-type: none"> <li>● 3.5.K-2.A: Identify and use everyday symbols.</li> <li>● 3.5.K-2.C: Explain ways that technology helps with everyday tasks.</li> </ul>	
<b><u>PA Academic Standards for BCIT (Business, Computer, and Information Technology):</u></b>	
<ul style="list-style-type: none"> <li>● 15.3.2.J: Reproduce active listening techniques modeled by familiar adults.</li> <li>● 15.3.2.N: Identify positive work habits in the classroom.</li> <li>● 15.4.2.A: Identify various technologies used in the classroom and at home.</li> <li>● 15.4.2.B: Demonstrate responsible use of technology and equipment.</li> <li>● 15.4.2.C: With prompting and support, identify peripheral devices of computer systems including input and output devices.</li> <li>● 15.4.2.D: Demonstrate the correct use of simple input technologies (e.g., mouse, touch screen, microphone, etc.)</li> <li>● 15.4.2.G: With help and support, select and use various software/applications for an intended purpose.</li> <li>● 15.4.2.M: With help and support, identify various technologies used in the workplace.</li> </ul>	
<b><u>CSTA (Computer Science Teachers Association) Standards:</u></b>	
<ul style="list-style-type: none"> <li>● 1A-CS-01: Select and operate appropriate software to perform a variety of tasks, and recognize that users have different needs and preferences for the technology they use.</li> <li>● 1A-CS-02: Use appropriate terminology in identifying and describing the function of common physical components of computing systems (hardware).</li> <li>● 1A-CS-03: Describe basic hardware and software problems using accurate terminology.</li> </ul>	
<b><u>ISTE (International Society for Technology in Education) Standards for Students:</u></b>	
<ul style="list-style-type: none"> <li>● Empowered Learner: Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning informed by the learning sciences.</li> </ul>	
<b><u>Interdisciplinary Standards (if applicable):</u></b>	
<b><u>PA Core Standards for ELA (English Language Arts):</u></b>	
<ul style="list-style-type: none"> <li>● ELA CC.1.1.1.B: Demonstrate understanding of the organization and basic features of print.</li> <li>● ELA CC.1.2.1.F: Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.</li> <li>● ELA CC.1.2.1.J: Use words and phrases acquired through conversations, reading, and being read to, and responding to texts, including words that signal connections and relationships between the words and phrases.</li> <li>● ELA CC.1.4.1.F: Demonstrate a grade-appropriate command of the conventions of standard English grammar, usage, capitalization, punctuation, and spelling.</li> <li>● ELA CC.1.5.1.A: Participate in collaborative conversations with peers and adults in small and larger groups.</li> </ul>	

<ul style="list-style-type: none"> <li>● ELA CC.1.5.1.B: Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.</li> <li>● ELA CC.1.5.1.C: Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.</li> <li>● ELA CC.1.5.1.E: Produce complete sentences when appropriate to task and situation</li> <li>● ELA CC.1.5.1.G: Demonstrate command of the conventional of standard English when speaking based on Grade 1 level and content.</li> </ul>	
<p><b><u>Essential Questions:</u></b></p> <ul style="list-style-type: none"> <li>● How can I choose, use, and troubleshoot technology to demonstrate my learning?</li> </ul>	<p><b><u>Understandings:</u></b></p> <p>Students will know that...</p> <ul style="list-style-type: none"> <li>● they can choose technology to effectively and efficiently complete a task and troubleshoot issues that may arise.</li> </ul>
<p><b><u>Knowledge:</u></b></p> <ul style="list-style-type: none"> <li>● rules and procedures for proper use of devices</li> <li>● digital devices have many parts and functions</li> <li>● steps of logging in and out of devices and programs</li> <li>● benefits of proper keyboarding technique</li> <li>● steps for accessing work</li> <li>● methods for basic troubleshooting</li> </ul>	<p><b><u>Do/Skills:</u></b></p> <p>Students will be able to...</p> <ul style="list-style-type: none"> <li>● name rules and procedures for proper use of devices</li> <li>● identify parts and functions of digital devices</li> <li>● demonstrate logging in and out of devices and programs</li> <li>● utilize proper keyboarding technique (<i>1st grade: posture, keyboard awareness, beginning to use 2 hands on the keyboard</i>)</li> <li>● complete steps for accessing work</li> <li>● apply methods for basic troubleshooting</li> </ul>
<p><b><u>Vocabulary:</u></b></p> <ul style="list-style-type: none"> <li>● <i>username</i> - a special name given to a user on a computer network</li> <li>● <i>password</i> - a secret combination of letters, numbers, and symbols to identify the user and keep their information safe</li> <li>● <i>log in</i> - accessing a device or program using a username/password</li> <li>● <i>log out</i> - signing out of a device or program at the end of a session</li> <li>● <i>login</i> - username and password combination</li> <li>● <i>click</i> - press the mouse button/touchpad one time</li> <li>● <i>double-click</i> - press the mouse button/touchpad very quickly two times</li> <li>● <i>drag and drop</i> - click to select an object, hold, move, and release</li> <li>● <i>scroll</i> - moving windows up, down, left, and right</li> <li>● <i>tab</i> - a clickable area at the top of the screen that lets the user switch to other pages</li> <li>● <i>window</i> - the viewing area on a computer</li> <li>● <i>full screen</i> - shortcut to view what's on the screen in its largest size</li> <li>● <i>shortcut</i> - a special key or combination of keys used to quickly perform a task <ul style="list-style-type: none"> <li>○ <i>undo</i> - control/z</li> <li>○ <i>paste</i> - control/v</li> <li>○ <i>logout</i> - control/shift/q/q</li> </ul> </li> <li>● <i>troubleshoot</i> - finding and fixing problems</li> <li>● <i>icon</i> - a small symbol or picture that represents a program, file, or action for a</li> </ul>	<p><b><u>Core Resources:</u></b></p> <ul style="list-style-type: none"> <li>● device (ex. Chromebook)</li> <li>● digital learning platform (ex. Clever)</li> <li>● learning management system (ex. Seesaw)</li> <li>● keyboarding program (ex. Keyboarding Without Tears)</li> <li>● productivity software (ex. Google Workspace for Education: Google Slides)</li> <li>● class website (ex. Google Sites) with linked resources for students</li> </ul>

program to perform when clicked

- *link* - an item like a word or icon that links to another page or file
- *app* - a type of software that allows the user perform certain tasks
- *program* - an application or a piece of software
- *web browser* - a program used to access the internet
- *web page* - a document that can be viewed on the internet using a browser
- *website* - a collection of linked web pages
- *shut down* - the process of turning off a device
- *restart* - the processing of turning on a device
- keyboarding terms
  - *keyboarding* - the action of typing information into a device
  - *home row* - the row on a computer or typewriter keyboard that contains the keys (home keys - *asdfjkl;*) and where four fingers of each hand return as a base
  - *cursor* - a blinking line that shows where the user is working and where the next letter or number will display
  - *shift key* - the key that is used to make uppercase letters and other characters
  - *space bar* - the long key above the touchpad that is pressed to make spaces
  - *backspace key* - click to move the cursor backwards, deletes mistakes
  - *delete* - erase mistakes
- *laptop computer* - portable computer that opens and closes and has a keyboard and a screen
- *desktop computer* - a computer that has multiple connected parts and must be plugged in to work
- parts of the computer terms
  - *keyboard* - a board that has keys to enter letters, numbers, and other symbols
  - *touchpad* - a flat surface that allows the user to control the device with finger movements and clicks, also known as a *trackpad*
  - *central processing unit* - the part that controls all functions of the computer, the “brain” of the computer
  - *screen* - the part that displays pictures and information the user can see

**Common Assessment(s):**

- Students demonstrate their ability to independently log in and log out of devices and programs.
- Students demonstrate their ability to find and navigate apps/programs/websites.
- Students name computer parts.
- Students demonstrate their ability to troubleshoot basic technology issues.
- Students demonstrate progress with their keyboarding skills through the use of a keyboarding program (ex. Keyboarding Without Tears).

**Supplemental Resources:**

- touchpad practice activities (ex. ABCya.com, Digipuzzle.net, Owlleboo.com)
- online typing activities (ex. ABCya.com, Digipuzzle.net, Typetastic.com)

<b>Grade, Subject/Course:</b> 1st Grade, Technology	
<b>Unit:</b> Global Collaborator	<input type="checkbox"/> Essential <input type="checkbox"/> Important <input checked="" type="checkbox"/> Compact
<b>Big Idea:</b>  <i>Connect It!</i> How can collaboration with digital tools improve learning?	
<b><u>PA Core Content Standards/Anchors (or National Standards):</u></b>	
<b><u>PA STEELS (Science, Technology &amp; Engineering, and Environmental Literacy &amp; Sustainability) Standards:</u></b>	
<ul style="list-style-type: none"> <li>● 3.5.K-2.C: Explain ways that technology helps with everyday tasks.</li> <li>● 3.5.K-2.R: Draw connections between technology and human experiences.</li> </ul>	
<b><u>PA Academic Standards for BCIT (Business, Computer, and Information Technology):</u></b>	
<ul style="list-style-type: none"> <li>● 15.3.2.J: Reproduce active listening techniques modeled by familiar adults.</li> <li>● 15.3.2.M: With prompting and support, demonstrate proper etiquette while using technology.</li> <li>● 15.3.2.N: Identify positive work habits in the classroom.</li> <li>● 15.3.2.O: With prompting and support, ask and answer questions about various communication strategies used in diverse settings (classroom, home, or social event).</li> <li>● 15.4.2.B: Demonstrate responsible use of technology and equipment.</li> <li>● 15.4.2.G: With help and support, select and use various software/applications for an intended purpose.</li> <li>● 15.4.2.M: With help and support, identify various technologies used in the workplace.</li> </ul>	
<b><u>CSTA (Computer Science Teachers Association) Standards:</u></b>	
<ul style="list-style-type: none"> <li>● 1A-CS-01: Select and operate appropriate software to perform a variety of tasks, and recognize that users have different needs and preferences for the technology they use.</li> <li>● 1A-IC-17: Work respectfully and responsibly with others online.</li> </ul>	
<b><u>ISTE (International Society for Technology in Education) Standards for Students:</u></b>	
<ul style="list-style-type: none"> <li>● Global Collaborator: Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.</li> </ul>	
<b><u>Interdisciplinary Standards (if applicable):</u></b>	
<b><u>PA Core Standards for ELA (English Language Arts):</u></b>	
<ul style="list-style-type: none"> <li>● ELA CC.1.2.1.F: Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.</li> <li>● ELA CC.1.2.1.J: Use words and phrases acquired through conversations, reading, and being read to, and responding to texts, including words that signal connections and relationships between the words and phrases.</li> <li>● ELA CC.1.4.1.F: Demonstrate a grade-appropriate command of the conventions of standard English grammar, usage, capitalization, punctuation, and spelling.</li> <li>● ELA CC.1.4.1.U: With guidance and support use a variety of digital tools to produce and publish writing including in collaboration with peers.</li> <li>● ELA CC.1.5.1.A: Participate in collaborative conversations with peers and adults in small and larger groups.</li> <li>● ELA CC.1.5.1.B: Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.</li> <li>● ELA CC.1.5.1.C: Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.</li> </ul>	

<ul style="list-style-type: none"> <li>● ELA CC.1.5.1.E: Produce complete sentences when appropriate to task and situation</li> <li>● ELA CC.1.5.1.G: Demonstrate command of the conventional of standard English when speaking based on Grade 1 level and content.</li> </ul>	
<p><b><u>Essential Questions:</u></b></p> <ul style="list-style-type: none"> <li>● How can collaboration with digital tools improve learning?</li> </ul>	<p><b><u>Understandings:</u></b></p> <p>Students will know that...</p> <ul style="list-style-type: none"> <li>● digital tools can be used to work with others and create a unique product.</li> </ul>
<p><b><u>Knowledge:</u></b></p> <ul style="list-style-type: none"> <li>● digital tools can improve collaboration</li> </ul>	<p><b><u>Do/Skills:</u></b></p> <p>Students will be able to...</p> <ul style="list-style-type: none"> <li>● use digital tools to complete a collaborative task</li> </ul>
<p><b><u>Vocabulary:</u></b></p> <ul style="list-style-type: none"> <li>● <i>collaboration</i> - working together to complete a task</li> <li>● <i>digital tools</i> - online learning tools like websites, programs, or applications that can be accessed via the internet and used to collaborate and share with others</li> </ul>	<p><b><u>Core Resources:</u></b></p> <ul style="list-style-type: none"> <li>● device (ex. Chromebook)</li> <li>● digital learning platform (ex. Clever)</li> <li>● learning management system (ex. Seesaw)</li> <li>● coding programs (Kodable, Code.org)</li> <li>● Hour of Code event <ul style="list-style-type: none"> <li>○ As time and schedules permit, collaboration with community member(s), EAHS coding classes, and the EASD Tech Department</li> </ul> </li> </ul>
<p><b><u>Common Assessment(s):</u></b></p> <ul style="list-style-type: none"> <li>● Students collaborate with their peers and others to solve coding puzzles (ex. working together to solve Kodable and Code.org puzzles).</li> </ul>	<p><b><u>Supplemental Resources:</u></b></p>

<b>Grade, Subject/Course:</b> 1st Grade, Technology	
<b>Unit:</b> Innovative Designer	<u>  X  </u> Essential <u>      </u> Important <u>      </u> Compact
<b>Big Idea:</b>  <i>Make It!</i> How can I use text, graphics, and multimedia tools to create original works?	
<p><b><u>PA Core Content Standards/Anchors (or National Standards):</u></b></p> <p><b><u>PA STEELS (Science, Technology &amp; Engineering, and Environmental Literacy &amp; Sustainability) Standards:</u></b></p> <ul style="list-style-type: none"> <li>● 3.5.K-2.A: Identify and use everyday symbols.</li> <li>● 3.5.K-2.C: Explain ways that technology helps with everyday tasks.</li> </ul> <p><b><u>PA Academic Standards for BCIT (Business, Computer, and Information Technology):</u></b></p> <ul style="list-style-type: none"> <li>● 15.3.2.J: Reproduce active listening techniques modeled by familiar adults.</li> <li>● 15.3.2.N: Identify positive work habits in the classroom.</li> <li>● 15.4.2.B: Demonstrate responsible use of technology and equipment.</li> <li>● 15.4.2.G: With help and support, select and use various software/applications for an intended purpose.</li> <li>● 15.4.2.K: With help and support, identify similarities and differences between text, graphics, audio, animation, and video.</li> <li>● 15.4.2.M: With help and support, identify various technologies used in the workplace.</li> </ul> <p><b><u>CSTA (Computer Science Teachers Association) Standards:</u></b></p> <ul style="list-style-type: none"> <li>● 1A-CS-01: Select and operate appropriate software to perform a variety of tasks, and recognize that users have different needs and preferences for the technology they use.</li> </ul> <p><b><u>ISTE (International Society for Technology in Education) Standards for Students:</u></b></p> <ul style="list-style-type: none"> <li>● Innovative Designer: Students use a variety of technologies within a design process to identify and solve problems by creating new, useful, or imaginative solutions.</li> </ul>	
<p><b><u>Interdisciplinary Standards (if applicable):</u></b></p> <p><b><u>PA Core Standards for ELA (English Language Arts):</u></b></p> <ul style="list-style-type: none"> <li>● ELA CC.1.1.1.B: Demonstrate understanding of the organization and basic features of print.</li> <li>● ELA CC.1.2.1.F: Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.</li> <li>● ELA CC.1.2.1.J: Use words and phrases acquired through conversations, reading, and being read to, and responding to texts, including words that signal connections and relationships between the words and phrases.</li> <li>● ELA CC.1.4.1.F: Demonstrate a grade-appropriate command of the conventions of standard English grammar, usage, capitalization, punctuation, and spelling.</li> <li>● ELA CC.1.4.1.U: With guidance and support use a variety of digital tools to produce and publish writing including in collaboration with peers.</li> <li>● ELA CC.1.5.1.A: Participate in collaborative conversations with peers and adults in small and larger groups.</li> <li>● ELA CC.1.5.1.B: Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.</li> <li>● ELA CC.1.5.1.C: Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.</li> <li>● ELA CC.1.5.1.E: Produce complete sentences when appropriate to task and situation</li> <li>● ELA CC.1.5.1.G: Demonstrate command of the conventional of standard English when speaking based on Grade 1 level and content.</li> </ul>	

<p><b><u>Essential Questions:</u></b></p> <ul style="list-style-type: none"> <li>• How can I use text, graphics, and multimedia tools to create original works?</li> </ul>	<p><b><u>Understandings:</u></b></p> <p>Students will know that...</p> <ul style="list-style-type: none"> <li>• text, graphics, and multimedia tools can be used to creatively share information and ideas.</li> </ul>
<p><b><u>Knowledge:</u></b></p> <ul style="list-style-type: none"> <li>• skills and tools used in word processing</li> <li>• text design varies based on the purpose of the work</li> <li>• graphics can enhance and clarify ideas</li> <li>• design tools allow for the creation of unique products</li> </ul>	<p><b><u>Do/Skills:</u></b></p> <p>Students will be able to...</p> <ul style="list-style-type: none"> <li>• utilize word processing tools</li> <li>• choose font style and color for an intended purpose</li> <li>• insert and resize related graphics</li> <li>• use design tools within multimedia apps and programs</li> </ul>
<p><b><u>Vocabulary:</u></b></p> <ul style="list-style-type: none"> <li>• <i>word processor</i> - a program that allows a user to use text and other features to create, edit, and save documents</li> <li>• word processing terms <ul style="list-style-type: none"> <li>○ <i>characters</i> - letters, numbers, punctuation marks, symbols, and spaces that can be entered on a computer</li> <li>○ <i>text</i> - words and characters displayed on a device</li> <li>○ <i>font style</i> - the way characters look (size, design, thickness, etc.)</li> <li>○ <i>font color</i> - the color of characters</li> </ul> </li> <li>• <i>shortcut</i> - a special key or combination of keys used to quickly perform a task <ul style="list-style-type: none"> <li>○ <i>undo</i> - control/z</li> </ul> </li> <li>• <i>text box</i> - a section or object on a page that allows a user to enter text</li> <li>• <i>graphic</i> - a picture or image</li> <li>• <i>toolbar</i> - a set of icons or buttons that are part of a software program and allow the user to complete tasks</li> <li>• <i>tools</i> - text, design, graphics, and other features used to create digital works</li> <li>• <i>insert</i> - add to project</li> <li>• <i>resize</i> - make an object bigger or smaller</li> <li>• <i>rotate</i> - turn an object in a clockwise or counterclockwise direction</li> <li>• <i>design tools</i> - software programs that allow users to create digital works for a variety of purposes</li> <li>• <i>slide</i> - a single page of an electronic presentation</li> </ul>	<p><b><u>Core Resources:</u></b></p> <ul style="list-style-type: none"> <li>• device (ex. Chromebook)</li> <li>• digital learning platform (ex. Clever)</li> <li>• learning management system (ex. Seesaw)</li> <li>• productivity software (ex. Google Workspace for Education: Google Slides)</li> </ul>

**Common Assessment(s):**

- Students create original word processing works using productivity software (ex. Googles Slides).

**Supplemental Resources:**

<b>Grade, Subject/Course:</b> 1st Grade, Technology	
<b>Unit:</b> Knowledge Constructor	<u>  X  </u> Essential <u>      </u> Important <u>      </u> Compact
<b>Big Idea:</b>  <i>Find It!</i> How can I navigate and use web resources in my learning?	
<p><b><u>PA Core Content Standards/Anchors (or National Standards):</u></b></p> <p><b><u>PA STEELS (Science, Technology &amp; Engineering, and Environmental Literacy &amp; Sustainability) Standards:</u></b></p> <ul style="list-style-type: none"> <li>● 3.5.K-2.A: Identify and use everyday symbols.</li> <li>● 3.5.K-2.C: Explain ways that technology helps with everyday tasks.</li> </ul> <p><b><u>PA Academic Standards for BCIT (Business, Computer, and Information Technology):</u></b></p> <ul style="list-style-type: none"> <li>● 15.3.2.J: Reproduce active listening techniques modeled by familiar adults.</li> <li>● 15.3.2.N: Identify positive work habits in the classroom.</li> <li>● 15.4.2.B: Demonstrate responsible use of technology and equipment.</li> <li>● 15.4.2.G: With help and support, select and use various software/applications for an intended purpose.</li> <li>● 15.4.2.L: With help and support, use web browser to locate content-specific websites.</li> <li>● 15.4.2.M: With help and support, identify various technologies used in the workplace.</li> </ul> <p><b><u>CSTA (Computer Science Teachers Association) Standards:</u></b></p> <ul style="list-style-type: none"> <li>● 1A-CS-01: Select and operate appropriate software to perform a variety of tasks, and recognize that users have different needs and preferences for the technology they use.</li> </ul> <p><b><u>ISTE (International Society for Technology in Education) Standards for Students:</u></b></p> <ul style="list-style-type: none"> <li>● Knowledge Constructor: Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts, and make meaningful learning experiences for themselves and others.</li> </ul>	
<p><b><u>Interdisciplinary Standards (if applicable):</u></b></p> <p><b><u>PA Core Standards for ELA (English Language Arts):</u></b></p> <ul style="list-style-type: none"> <li>● ELA CC.1.1.1.B: Demonstrate understanding of the organization and basic features of print.</li> <li>● ELA CC.1.2.1.F: Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.</li> <li>● ELA CC.1.2.1.J: Use words and phrases acquired through conversations, reading, and being read to, and responding to texts, including words that signal connections and relationships between the words and phrases.</li> <li>● ELA CC.1.4.1.F: Demonstrate a grade-appropriate command of the conventions of standard English grammar, usage, capitalization, punctuation, and spelling.</li> <li>● ELA CC.1.4.1.U: With guidance and support use a variety of digital tools to produce and publish writing including in collaboration with peers.</li> <li>● ELA CC.1.5.1.A: Participate in collaborative conversations with peers and adults in small and larger groups.</li> <li>● ELA CC.1.5.1.B: Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.</li> <li>● ELA CC.1.5.1.C: Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.</li> <li>● ELA CC.1.5.1.E: Produce complete sentences when appropriate to task and situation</li> </ul>	

<ul style="list-style-type: none"> <li>• ELA CC.1.5.1.G: Demonstrate command of the conventional of standard English when speaking based on Grade 1 level and content.</li> </ul>	
<p><b><u>Essential Questions:</u></b></p> <ul style="list-style-type: none"> <li>• How can I navigate and use web resources in my learning?</li> </ul>	<p><b><u>Understandings:</u></b></p> <p>Students will know that...</p> <ul style="list-style-type: none"> <li>• the internet is a valuable resource where factual information can be found and applied to learning.</li> </ul>
<p><b><u>Knowledge:</u></b></p> <ul style="list-style-type: none"> <li>• web browsers allow users to navigate web resources</li> </ul>	<p><b><u>Do/Skills:</u></b></p> <p>Students will be able to...</p> <ul style="list-style-type: none"> <li>• navigate teacher-selected web resources</li> </ul>
<p><b><u>Vocabulary:</u></b></p> <ul style="list-style-type: none"> <li>• <i>internet</i> - what we connect to when we go online, a group of computers and servers that are connected to each other</li> <li>• <i>web browser</i> - a program used to access the internet</li> <li>• <i>web page</i> - a document that can be viewed on the internet using a browser</li> <li>• <i>website</i> - a collection of linked web pages</li> <li>• <i>tab</i> - a clickable area at the top of the screen that lets the user switch to other pages</li> <li>• <i>window</i> - the viewing area on a computer</li> <li>• <i>app</i> - a type of software that allows the user perform certain tasks</li> <li>• <i>program</i> - an application or a piece of software</li> <li>• <i>icon</i> - a small symbol or picture that represents a program, file, or action for a program to perform when clicked</li> <li>• <i>link</i> - an item like a word or icon that links to another page or file</li> </ul>	<p><b><u>Core Resources:</u></b></p> <ul style="list-style-type: none"> <li>• device (ex. Chromebook)</li> <li>• digital learning platform (ex. Clever)</li> <li>• learning management system (ex. Seesaw)</li> <li>• productivity software (ex. Google Workspace for Education: Google Slides)</li> <li>• class website (ex. Google Sites) with linked resources for students</li> </ul>
<p><b><u>Common Assessment(s):</u></b></p> <ul style="list-style-type: none"> <li>• Students demonstrate ability to access and independently use web resources.</li> <li>• Students use productivity software (ex. Google Slides) to create a slide presentation.</li> </ul>	<p><b><u>Supplemental Resources:</u></b></p>