Second Grade Technology Class

Unit:	**Troubleshooting computer problems/ bookmarking a website/ Tabs**
Big Ideas:	**Reviewing the steps to login to the computer. Troubleshooting computer problems (volume, wifi, searching on the computer, power/restart/shut down, Caps lock, Num lock) Reviewing signing out using both methods. Bookmarking a website (benefits and how to do it) Opening and closing tabs.**
Unit Essential Questions:	**How can I troubleshoot some of the main tech issues that occur on a computer? How can I easily access a website I use regularly? How can I open other tabs?**

Concept & Pacing	New Emphasis (Pa Core Standard)	Key Vocabulary	Essential Questions	Mini-Lessons/Activities	Instructional Materials	Assessments
2 classes	15.4.2.A: Identify various technologies used in the classroom and at home 15.4.2.B: Demonstrate responsible use of technology and equipment 15.4.2.D: Demonstrate the correct use of simple input technologies 15.4.2.L: With help and support, use web browser to locate content-specific websites.	*Computer parts (monitor, mouse, keyboard, headphones) *Caps lock *Num lock *Start button *Menu *Icons *Tabs	*Where is the start menu? *What is an icon? *How can I adjust the volume on the computer? *How can I check my wifi signal? *How do I bookmark a website? *How do I sign in and sign-out of the computer? *How do I restart or shut down? *How do I open more tabs when working online?	*Tasks to troubleshoot: -Find software using the start button -Adjust volume control -Lost WI-FI signal -Date and time *Sign in and out/restart	*Computer	*Teacher observation

Unit:	**Make a copy of a google file/Google Drive/ Cut, Copy and Paste/ Formatting text**
Big Idea:	**Cutting, copying and pasting words, shapes and images using the right button and also the keyboard shortcuts. Finding the Google Drive. Formatting text in Google slides.**
Unit Essential Questions:	**What is the difference between cut and copy? How can using cut, copy, and paste help when working on files? How can I cut, copy and paste words using both the right button and also the keyboard shortcuts? How can I cut, copy and paste shapes and images using both the right button and keyboard shortcuts? How can I change the font, size and color?**

Concept & Pacing	New Emphasis (Pa Core Standard)	Key Vocabulary	Essential Questions	Mini-Lessons/Activities	Instructional Materials	Assessments

3-4 classes	15.3.5 M: Apply proper etiquette while using technology. 15.4.5.G: Create a digital project using appropriate software/application for an intended task	*Google drive *Cut *Copy *Paste *Right click *Keyboard shortcuts *Font	*How can I use cut, copy and paste to help when working in files? *How can I cut, copy and paste using both the right button and also *How can I change the font, font size, and color?	*Jack-O-Lantern copy and paste activity *Cut, copy and paste files	*Jack-O-Lantern copy and paste file *Cut, copy and paste files to practice with words and images.	*Teacher observation

Unit:	**Formatting in Google Docs/ major keyboard keys/ spell check/ Delete versus backspace/ UNDO**
Big Ideas:	**Demonstrating how the major keys on the keyboard help us do things on the computer (enter, spacebar, num lock, caps lock, delete and backspace). Formatting text in Google docs using font, color, B, U, I, etc and also alignment. . Using spell check. Using UNDO to fix a minor problem or a major problem.**
Unit Essential Questions:	**What do these keys used for on the keyboard (enter, backspace, spacebar, num lock, caps lock)? How can we change the way words look using things like font, size, colors and alignment? How can I use spell check to proofread a document? How can UNDO help fix a mistake?**

Concept & Pacing	**New Emphasis (Pa Core Standard)**	**Key Vocabulary**	**Essential Questions**	**Mini-Lessons/Activities**	**Instructional Materials**	**Assessments**
2-3 classes (More if poem generator project)	15.4.2.D: Demonstrate the correct use of simple input technologies 15.4.2.B: Demonstrate responsible use of technology and equipment 15.4.2.G: With help and support, select and use various software/applications for an intended purpose.	*Enter *Backspace versus Delete *Spacebar *Num lock *Caps lock *Cursor *Format terms such as font, bold, underline, italics, highlight *UNDO *Spell check	*How can these major keyboard keys be used? *How can keys such as enter, backspace, and num lock help us use the computer? *How can we change the way text looks? *What is the difference between delete and backspace? *How can I check and fix my spelling and grammar on the computer? *How can I use UNDO to fix a mistake?	* Using the major keys on the keyboard (review with tasks) *Files if needed (formatting activity) or students can type and format with teacher on computers.	*Formatting in Word Lesson *Keyboard activity file using major keys *Cut, copy, and paste activities *Formatting in Word file on my website *Poem generator on my website	*Formatting activities *Poem generator (skills: copy/paste, format text, images)

Unit:	**Google Drawings**

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Big Ideas:	**Using the tools in Google Drawings to create a robot scene.**
Unit Essential Questions:	**How can the drawing tools be used in Google Drawings? How can I draw and format shapes? How can I draw and format lines? How can I insert an image and overlap with shapes?**

Concept & Pacing	New Emphasis (Pa Core Standard)	Key Vocabulary	Essential Questions	Mini-Lessons/Activities	Instructional Materials	Assessments
3-5 classes	15.4.2.D: Demonstrate the correct use of simple input technologies 15.4.2.B: Demonstrate responsible use of technology and equipment 15.4.2.G: With help and support, select and use various software/applications for an intended purpose.	*Drawing tools *Image *Format *Crop *Overlap (order)	*How can I use shapes and lines to create a picture? *How can I use Google Drawings? *How can I insert an image and put it behind the shapes?	*Create a robot together to explore Google drawings *Create a comic character(s)—	*Google Drawing	*Robot (done together to learn the tools) and Comic Characters

Unit:	**Keyboarding using homerow and touch typing**
Big Ideas:	**Using proper posture. Locating letters with left and right hands. Using homerow to touch type.**
Unit Essential Questions:	**How can knowing where the letters are on the keyboard help me? Why is using two hands on the keyboard better than one? What is homerow and how that can help me type better?**

Concept & Pacing	New Emphasis (Pa Core Standard)	Key Vocabulary	Essential Questions	Mini-Lessons/Activities	Instructional Materials	Assessments
2 classes then use as warm-up	15.4.2.B: Demonstrate responsible use of technology and equipment	*Keyboard *Typing *Homerow	*Why is using two hands better than one when using the computer? *What is homerow: why is it called that? What fingers do I use? How do I know I am on homerow? *Why is it important to use homerow to type?	*Discuss and demonstrate how two hands to type is better than one. *Demonstrate how knowing where the keys are help go faster. *Demonstrate and introduce homerow keys *Color keyboard chart *Introduce typetastic (level 5 homerow) *Plural typing words file	*Color keyboard chart *Typetastic *Other typing programs on my website (2nd grade page-keyboarding) *Plural words typing file **(2nd grade keyboarding page)** ***Spelling words** ***Typing Club Jr.**	*Hand placement (teacher observation)

Unit:	**Internet Safety/ Being a good digital citizen (at home, school, and online)**

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Big Ideas:	**Staying safe online, both at home and school. Sharing information online.**					
Unit Essential Questions:	**How do you stay safe when you visit websites? What information is too personal to share online?**					
Concept & Pacing	**New Emphasis (Pa Core Standard)**	**Key Vocabulary**	**Essential Questions**	**Mini-Lessons/Activities**	**Instructional Materials**	**Assessments**
2-3 days	15.4.2.B: Demonstrate responsible use of technology and equipment 15.3.2.T: With prompting and support, answer questions related to digital citizenship	*Internet *Websites *Personal information	*How can I go places safely on the computer? *Should I go on websites without asking an adult? *What information is appropriate to share online?	*Follow the digital trail and keep it private lessons from Common sense education (combine as one) *Webville movie-Router's Birthday Surprise (link on my website-2nd grade Internet Safety page) -Webville outlaws	*Follow the digital trail and keep it private lessons *Webville outlaws lesson (Router's birthday surprise) and draw your own Wanted poster for Internet bad guy	*wanted poster
Unit:	**Coding**					
Big Ideas:	**Identify and fix errors in a computer program to ensure it runs as intended. Create programs that include loops. Demonstrate block coding.**					
Unit Essential Questions:	**What is computer coding and how does it apply to computers, games, apps, and technology? How do you code using blocks?**					
Concept & Pacing	**New Emphasis (Pa Core Standard)**	**Key Vocabulary**	**Essential Questions**	**Mini-Lessons/Activities**	**Instructional Materials**	**Assessments**
2-3 classes	15.3.5 M: Apply proper etiquette while using technology. 1A-AP-08: Model daily processes by creating and following algorithms (set of step-by-step instructions) to complete tasks. 1A-AP-11: Break down the steps needed to solve a problem into a pride sequence of instructions. 1A-AP-10: Develop programs with sequences and simple loops to express ideas or address a problem.	*Coding *Block coding *Loops	*How do you code using block coding? *How can you test a program to see if it runs correctly? *What is a loop?	*Coding video on BrainpopJr.	*Demo of lessons assigned in code.org accounts *Code.org *Tynker	