

Moon Area School District Curriculum Map

Course: Computer 4

Grade Level: 4th Grade

Content Area: Computer/Technology

Frequency: Full-Year Course, 1 day every 5 days

Big Ideas:

1. Input and output devices are used to navigate, stay digitally organized and troubleshoot technology.
2. Students need to take ownership and responsibility of their digital lives.
3. Digital citizenship skills are essential to participate in cyber communities and make smart choices online.
4. Keyboarding skills are necessary to use the keyboard efficiently as a primary tool for communication.
5. Coding develops skills in math, problem solving, communication and creativity.
6. Computers are a tool used to learn, create and discover new things.
7. Creating documents and presentations is crucial to 21st century career success.
8. Enhance creativity and productivity on iPads by seamlessly integrating Pages, Keynote, Numbers and iMovie to create dynamic multimedia projects.
9. Assessment tools on the iPad can be used to assist teachers in cross-curricular areas to enhance student performance.

Essential Questions:

10. How do input and output devices work together to make a computer system?
11. How can you take ownership of your actions when using digital tools?
12. What strategies can you use to stay safe, be responsible, and be kind online?
13. Why should you learn how to use the keyboard quickly and efficiently?
14. How can you use coding to better understand technology?
15. How can you use the computer to help you learn, create, and discover new things?
16. How can you use documents and presentations to convey your thoughts and ideas?
17. How can Pages, Keynote, Numbers, and iMovie on iPads transform the way we create, communicate and present information?
18. How can assessment tools on an iPad be used to enhance students' understanding and engagement in a fourth-grade classroom?

Primary Resource(s) & Technology:

Promethean Board, Computers, iPads, Clever, Typing.com, Code.org, Scratch, Common Sense Education, FBI Safe Online Surfing, Office 365

Pennsylvania and/or focus standards referenced at:

www.pdesas.org
www.education.pa.gov

Big Ideas/EQs	Focus Standard(s)	Assessed Competencies (Key Content and Skills)	Timeline
1, 10	15.4.5.C 1B.CS.01 1B.CS.02 1B.CS.03	<ul style="list-style-type: none"> • Determine and explain which parts of the computer are input and output devices and why. • Describe how devices and components of a computer interact using correct terminology. • Model how computer hardware and software work together as a system to accomplish tasks, including input, output, processor, sensor, and storage. • Log in using username and password. 	Ongoing
2, 3, 11, 12	15.4.5.B 15.4.5.L	<ul style="list-style-type: none"> • Define the term "digital footprint" and identify the online activities that contribute to it. • Identify ways they are -- and are not -- in control of their digital footprint. • Understand what responsibilities they have for the digital footprints of themselves and others. • Reflect on the characteristics that make someone an upstanding digital citizen. • Recognize what cyberbullying is. • Identify the reasons why people share information about themselves online. • Explain the difference between private and personal information. • Explain why it is risky to share private information online. 	Ongoing
4, 13	15.4.5.D	<ul style="list-style-type: none"> • Use keyboard as an input device to communicate to the computer. • Utilize home row finger placement to type top row letters, bottom row letters, enter, shift, space bar and backspace. • Type school email independently. 	Ongoing
5, 14	1.B.AP.08 1.B.AP.10 1.B.AP.11 1.B.AP.12 1.B.AP.15	<ul style="list-style-type: none"> • Compare and refine multiple algorithms for the same task and determine which is the most appropriate. • Properly write sequenced algorithms using arrows to represent directions. • Students develop a programming plan to be used to check if the program is correct. • Identify patterns in a sequence and use them to create coding loops. • Persevere through coding bugs by changing the sequence, following 	Ongoing

		<p>algorithm step-by-step, or trial and error to fix problems.</p> <ul style="list-style-type: none"> • Identify actions that correlate to input events. • Use conditional if/then commands to simplify coding algorithms. • Define coding, sequencing, loops, bugs, events and conditions. 	
6, 7, 15, 16	15.4.5.G 15.4.5.K 15.6.5.L	<ul style="list-style-type: none"> • Log in to Office 365 and open a Word document. • Properly change font, style, size, color and alignment. • Properly insert bullets and a number list. • Properly insert a table. • Log in to Office 365 and open a PowerPoint document. • Properly insert text box, photos, theme/design, presentation mode and add slides. • Apply 6 by 6 rule, apply transitions and animation to PowerPoint slides. 	Ongoing
7, 8, 16, 17	15.4.5.G 15.4.5.K 15.6.5.L	<ul style="list-style-type: none"> • Open the Pages app. • Properly insert templates, text, photos, shapes, drawings, audio, page layouts and smart annotations. • Open the Keynotes app. • Properly insert slides, photos, shapes, drawings, tables, charts, animation, and videos. • Open the iMovie app. • Properly insert storyboard, movies, transitions, photos, titles, overlays, audio, and effects. • Open the Numbers app. • Properly format sheets. • Properly insert formulas, functions, charts, shapes and drawings. 	Ongoing
9, 18	15.4.5.D 15.6.5.L	<ul style="list-style-type: none"> • Properly use assessment tools. • Accurately type essays. 	Ongoing