MP1-4 Tech Literacy

Content Area: **Technology**Course(s): **Technology 6**Time Period: **MP1-4**

Length: Once per week Status: Published

Essential Questions

- Who builds computers (hardware, peripherals, etc.)?
- What makes computers work (software programs, drivers, etc.)?
- What is a computer network and why do I need to know how to navigate a network?
- Does technology literacy guarantee success?
- Why do I need to be technologically literate?
- Who are digital citizens?
- How should students respond to the challenging situations they experience daily online?

Big Ideas

- Resources need to be utilized wisely to have positive effects on the environment and society.
- Some technological decisions involve tradeoffs between environmental and economic needs, while others have positive effects for both the economy and environment.
- Economic, political, social and cultural aspects of society drive development of new technological products, processes, and systems.

Cross-Curricular Integration

English Language Arts

- RST.6-8.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks
- 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.
- 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).
- RST.6-8.10 By the end of grade 8, read and comprehend science/technical texts in the grades 6-8 text complexity band independently and proficiently.
- SL.6.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing

their own clearly.

• 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.

Career Readiness, Life Literacies and Key Skills Integration

Performance Expectations

- 9.4.8.CI.3: Examine challenges that may exist in the adoption of new ideas (e.g., 2.1.8.SSH, 6.1.8.CivicsPD.2).
- 9.4.8.CI.4: Explore the role of creativity and innovation in career pathways and industries.
- 9.4.8.CT.2: Develop multiple solutions to a problem and evaluate short- and long-term effects to determine the most plausible option (e.g., MS-ETS1-4, 6.1.8.CivicsDP.1)
- 9.4.8.DC.3: Describe tradeoffs between allowing information to be public (e.g., within online games) versus keeping information private and secure.
- 9.4.8.DC.4: Explain how information shared digitally is public and can be searched, copied, and potentially seen by public audiences.
- 9.4.8.DC.5: Manage digital identity and practice positive online behavior to avoid inappropriate forms of self-disclosure.
- 9.4.8.DC.6: Analyze online information to distinguish whether it is helpful or harmful to reputation.
- 9.4.8.GCA.1: Model how to navigate cultural differences with sensitivity and respect (e.g., 1.5.8.C1a).
- 9.4.8.GCA.2: Demonstrate openness to diverse ideas and perspectives through active discussions to achieve a group goal.
- 9.4.8.IML.1: Critically curate multiple resources to assess the credibility of sources when searching for information.
- 9.4.8.IML.3: Create a digital visualization that effectively communicates a data set using formatting techniques such as form, position, size, color, movement, and spatial grouping (e.g., 6.SP.B.4, 7.SP.B.8b)
- 9.4.8.IML.7: Use information from a variety of sources, contexts, disciplines, and cultures for a specific purpose (e.g., 1.2.8.C2a, 1.4.8.CR2a, 2.1.8.CHSS/IV.8.AI.1, W.5.8, 6.1.8.GeoSV.3.a, 6.1.8.CivicsDP.4.b, 7.1.NH. IPRET.8).
- 9.4.8.IML.12: Use relevant tools to produce, publish, and deliver information supported with evidence for an authentic audience.
- 9.4.8.TL.2: Gather data and digitally represent information to communicate a real-world problem (e.g., MS-ESS3-4, 6.1.8.EconET.1, 6.1.8.CivicsPR.4).

- 9.4.8.TL.3: Select appropriate tools to organize and present information digitally.
- 9.4.8.TL.4: Synthesize and publish information about a local or global issue or event (e.g., MSLS4-5, 6.1.8.CivicsPI.3).
- 9.4.8.TL.6: Collaborate to develop and publish work that provides perspectives on a real-world problem.

Practices

- Act as a responsible and contributing community member and employee.
- Consider the environmental, social and economic impacts of decisions.
- Demonstrate creativity and innovation
- Utilize critical thinking to make sense of problems and persevere in solving them
- Model integrity, ethical leadership and effective management.
- Plan education and career paths aligned to personal goals
- Use technology to enhance productivity, increase collaboration and communicate effectively.
- Work productively in teams while using cultural/global competence.

Enduring Understandings

- 8.2.8.ITH.1: Explain how the development and use of technology influences economic, political, social, and cultural issues.
- 8.2.8.ETW.4: Compare the environmental effects of two alternative technologies devised to address climate change issues and use data to justify which choice is best.

Activities and Assessments

- Let's Take a Typing Speed Test! Take a minute to find out your true typing speed and to get a typing skills analysis.: http://www.typingtest.com
- Keyboarding Games: http://www.abcya.com/search.htm?text=Keyboarding
- Learning.com

Additional Resources

- o Antoinette Smith | Software Engineer: https://ny.pbslearningmedia.org/resource/d3364203-71ec-4a88-86b1-3a16185b59d5/antoinette-smith-full-stack-software-engineer-video/ (Amistad Law)
- o Video: Technology Dissection: https://ny.pbslearningmedia.org/resource/e0f6d7cc-3c66-4016-9907-8b413121d0fa/
- o Video: Teen Voices: Presenting Yourself Online: https://www.commonsense.org/education/digital-citizenship/lesson/who-are-you-online (available in Spanish) (Diversity, Equity, and Inclusion)
- Supporting students with disabilities for the Hour of Code: https://hourofcode.com/us/supporting-special-needs-students (Disabilities Awareness)