

4th Grade Technology Standards

NOTE: Throughout this document, learning targets are identified by type as Knowledge (“K”), Reasoning (“R”), Skill (“S”), or Product (“P”).

4th Grade Technology Standard 1: A student must use digital tools and resources for problem solving and decision making.

Benchmark 1: The student can identify and investigate a problem and generate possible solutions.

Learning Targets (Type) 1.1:

- a. I can identify a problem/authentic issue to investigate. (S)
- b. I can conduct a search using keywords to narrow or broaden search results. (S,R)
- c. I can generate possible solutions using digital tools and data. (S,K)

Benchmark 2: The student can collect data and information using digital tools.

Learning Targets (Type) 1.2:

- a. I can predict which sources will provide the desired data. (K,R)
- b. I can select and use a variety of primary and secondary sources. (K)
- c. I can collect information using digital tools (e.g., Internet, digital thermometer, camera, probe, weather station, survey, database). (S)
- d. I can use online concept mapping software to help me identify and select information to make decisions. (S)

Benchmark 3: The student can organize collected data and information using a variety of tools.

Learning Targets (Type) 1.3:

- a. I can create and record categories, using digital tools, for organizing information into major topics, sub-topics, and ideas. (S)
- b. I can predict a result using patterns and trends in data. (R)

Benchmark 4: The student can identify the accuracy, diversity, and point of view including, Montana American Indians, of digital information.

Learning Targets (Type) 1.4:

- a. I can recognize that all authors have a personal bias. (K)
- b. I can evaluate relevance and currency of information. (K)
- c. I can explain the difference of basic domain names (e.g., .com, .gov, .edu, .org). (K)
- d. I can compare information from multiple sources, including digital sources, to help determine accuracy. (R)

Benchmark 5: The student can share information ethically and note sources.

Learning Targets (Type) 1.5:

- a. I can create projects using digital information ethically. (K,P)
- b. I can tag and share bookmarked sites. (S)
- c. I can note digital sources used to complete projects. (S)
- d. I can follow copyright laws when using text, images, videos, and/or other sources and obtain permission to use the work of others, and cite resources appropriately. (K)

4th Grade Technology Standard 2: A student must collaborate and communicate globally in a digital environment.

Benchmark 1: The student can identify and explore online collaboration and communication tools.

Learning Targets (Type) 2.1:

- a. I can use online communication tools with teacher assistance (e.g., e-mail, VoIP, chat/IM). (K)
- b. I can participate in a whole class online collaboration project (e.g., class-to-class, Flat Stanley, author communication, pen pals). (K,S)

Benchmark 2: The student can identify and explore safe, legal, and responsible use of digital collaboration and communication tools.

Learning Targets (Type) 2.2:

- a. I can recognize and describe the potential risks and dangers associated with various forms of online communication. (K)
- b. I can explain when and why it is appropriate to use a personal digital device. (K)
- c. I can describe cyber-bullying and strategies to deal with such situations. (K,R)
- d. I can discuss and follow district and school acceptable use policy. (K)
- e. I can articulate how to respect the privacy of others' information and digital workspace. (K,R)
- f. I can explain the importance of online identity and password protection. (K,R)
- g. I can recognize and describe the advantages and risks of making a personal spending choice online. (K,R)

Benchmark 3: The student can communicate the results of research and learning with others using digital tools.

Learning Targets (Type) 2.3:

- a. I can observe and discuss digital presentations media. (K)
- b. I can tag and share bookmarked sites. (K)
- c. I can share research on a specific topic using presentation software. (K,S)
- d. I can publish my research presentation on a class or other website. (K,S)

Benchmark 4: The student can explore how technology has expanded the learning environment beyond the traditional classroom.

Learning Targets (Type) 2.4:

- a. I can establish a connection with others using a digital tool. (K,S)
- b. I can collaborate with others outside the classroom. (K,S)
- c. I can participate in a global learning environment with guidance. (K,S)
- d. I can provide examples of technologies that might be used to solve a specific economic, environmental, health, political, scientific or social problem. (K,R)

4th Grade Technology Standard 3: A student must apply digital tools and skills with creativity and innovation to express his/herself, construct knowledge, and develop products and processes.

Benchmark 1: The student can use digital tools for personal expression.

Learning Targets (Type) 3.1:

- a. I can use digital tools for personal expression (e.g., use music, sound, or video programs to create a project). (S)
- b. I can create a labeled diagram using drawing software. (S)
- c. I can select exemplary work to store in an electronic portfolio. (K)
- d. I can create multiple slides in a presentation. (S)

Benchmark 2: The student can use various digital media to share information and tell stories.

Learning Targets (Type) 3.2:

- a. I can explore various digital tools to create multimedia projects. (S)
- b. I can record narration in a slide show. (S)
- c. I can perform some simple photo editing. (S)
- d. I can create multimedia projects using multiple digital tools. (K,S)

- e. I can explore online presentation tools. (S)
- f. I can explore presentation software installed on my computer. (S)
- g. I can share projects with others. (S)
- h. I can prepare a multimedia project for publication online. (S)
- i. I can display my work with a digital projector. (K)

Benchmark 3: The student can use technology to discover connections between facts.

Learning Targets (Type) 3.3:

- a. I can use technology to discover connections between facts. (S)
- b. I can use technology to organize facts. (R)
- c. I can corroborate a fact using more than one source. (R)
- d. I can compare one digital source with another. (R)
- e. I can use online reference tools appropriate for my grade level. (K)
- f. I can rearrange facts using cut and paste commands. (S)
- g. I can use technology to discover connections between facts. (S,R)

Benchmark 4: The student can understand ownership of digital media.

Learning Targets (Type) 3.4:

- a. I can discuss and define the rights of the digital author copyright. (K)
- b. I can explain why there are restrictions on the way digital information can be used. (K)
- c. I can define plagiarism in my own words. (K)
- d. I can discuss how to identify the author/creator of digital material. (K)

Benchmark 5: The student can use digital tools and skills to construct new personal understandings.

Learning Targets (Type) 3.5:

- a. I can evaluate how technology affects work and play (e.g., compare and contrast life with and without a digital tools). (R)
- b. I can tell the difference between using technology products and creating digital products. (K)
- c. I can articulate how computers are used in my home. (K)
- d. I can identify common household appliances that use computer technology. (K)
- e. I can develop a new personal understanding using digital tools. (R)

4th Grade Technology Standard 4: A student must possess a functional understanding of technology concepts and operations.

Benchmark 1: The student can show skills needed to use communication, information, and processing technologies.

Learning Targets (Type) 4.1:

- a. I can click on icons, buttons, and menus to produce a desired outcome. (K)
- b. I can identify functions represented by symbols and icons commonly found in application programs (e.g., font, size, bold, underline, alignment, color of type). (K)
- c. I can demonstrate developmentally appropriate keyboarding skills. (S)
- d. I can use correct posture and hand, arm, and fingering positions to type complete sentences. (K)
- e. I can locate and correctly use parts of various digital devices (desktop computer, laptop computer, digital cameras, etc.). (S)
- f. I can follow lab and classroom rules related to responsible use of digital equipment. (K)
- g. I can effectively use operating systems and user interfaces (file management, settings, control panel, etc.). (S)
- h. I can work with a digital template. (S)
- i. I can save and retrieve files from my own folder on a network drive. (K)
- j. I can navigate the hierarchy of network drives and folders as directed. (S)
- k. I can change how files are viewed (e.g., "show thumbnails"). (K)

Benchmark 2: The student can use appropriate terminology when communicating about

current technology.

Learning Targets (Type) 4.2:

- a. I can use appropriate terminology when communicating about current technology digital tools, Global Positioning System (GPS), Geographic Information System (GIS), digital, database terms: category, field, records, online, email, chat, IM (instant messaging), texting, VoIP), acceptable use, wiki, blog.
(K)
- b. I can understand the difference between “save” and “save as.” (K)

Benchmark 3: The student can transfer current knowledge to learning of new technology skills.

Learning Targets (Type) 4.3:

- a. I can apply existing skills to assess the possible uses of a new digital tool (e.g., software, hardware).
(K,S)