

Grades 4, 5

Adopted 2010

Information, Communication and Productivity

Enduring Knowledge - Understandings

- appropriate terminology, computer operations and applications assist in gaining confidence in the use of technology.
- technology requires proper care and maintenance to be used effectively.
- a variety of media is used to support directed and independent learning.
- technology is used to communicate in a variety of ways including global communications.
- technology (e.g. keyboarding, word processing, spreadsheets, presentation) is used effectively and efficiently to accomplish a task.

Skills and Concepts - Information

- investigate different technology devices (e.g., CPU, monitor, keyboard, disk drive, printer, mouse)
- describe the uses of technology (e.g., computers, telephones, cell phones, digital and video cameras, Internet) at home, school and workplace
- use appropriate technology terms (e.g., hardware, software, CD, hard drive)
- explain the use of networks and the need for login procedures (e.g., stand alone, network, file server, LANs network resources)
- demonstrate proper keyboarding techniques, optimal posture and correct hand placement (e.g., home row finger placement) at the computer workstation

Skills and Concepts - Communication

- use technology to communicate in a variety of modes (e.g., audio, speech to text, print, media)
- participate in online group projects and learning activities using technology communications
- create a variety of tasks using technology devices and systems to support authentic learning
- use technology to collect data for content area assignments/projects
- use a variety of tools and formats (oral presentations, journals and multimedia presentations) to summarize and communicate the results of observations and investigations
- use online collaborative tools (e.g., email, videoconferencing)

Skills and Concepts - Productivity

- develop, publish and present information in print and digital formats
- use productivity tools to produce content area assignments/projects

Safety and Ethical/Social Issues**Enduring Knowledge - Understandings**

- responsible and ethical use of technology is necessary to ensure safety.
- technology is used in collaborative and interactive projects to enhance learning.
- acceptable technology etiquette is essential to respectful social interactions and good citizenship.
- technology is used in jobs and careers to support the needs of the local and global community.
- assistive technology supports learning to ensure equitable access to a productive life.

Skills and Concepts - Safety

- explain the importance of safe Internet use (e.g., iSafe skills)
- apply safe behavior when using technology

Skills and Concepts - Ethical Issues

- investigate basic issues related to responsible use of technology and describe personal consequences of inappropriate use (e.g., plagiarism, intellectual property, copyright and the conditions of Acceptable Usage Policy)
- explore, investigate and practice the use of technology in an appropriate, safe and responsible manner
- use ethical behavior while using technology in personal and community contexts

Skills and Concepts - Social Issues

- use technology to collaborate and engage in interactive projects with others (e.g., local, national and global) and credit all participants for their contribution to the work
 - use proper social etiquette with any technology (e.g., email, blogs, IM, telephone, help desk)
 - investigate how assistive technologies supports learning
 - explain how technology has had an influence on our world
 - explain how technology supports career options and lifelong learning
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**Research,
Inquiry/Problem-
Solving and Innovation****Enduring Knowledge - Understandings**

- technology assists in gathering, organizing and evaluating information from a variety of sources to answer essential questions.
 - technology supports critical thinking skills used in inquiry/problem solving to make informed decisions.
 - technology is used to produce an innovative product or system.
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Skills and Concepts - Research

- gather and use accurate information from a variety of electronic sources (e.g. teacher-selected web sites, CDROM, encyclopedias and automated card catalog, online virtual library; word processing, database, spreadsheet) in all content areas
 - correctly cite sources
 - evaluate the accuracy, relevance, appropriateness, comprehensiveness and bias of electronic information sources
 - use technology tools to process data and report results
 - use content-specific tools to enhance understanding of content (e.g., environmental probes, sensors, robotics, simulation software and measuring devices)
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Skills and Concepts - Inquiry/Problem-solving

- determine which technology is useful and select the appropriate tool(s) (e.g., calculators, data collection probes, videos, educational software) to inquire/problem-solve in self-directed and extended learning
 - use technology to solve problems using critical thinking and problem-solving strategies
 - solve content-specific problems using a combinations of technologies
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Skills and Concepts - Innovation

- use technology to organize and develop creative solutions, ideas or product