

Montpelier Schools
Fourth Grade
Technology Applications and Information Tools
Ohio Technology Content Standards 3, 4, and 5
Scope and Sequence

Key: I – Introduce, C – Continuation, M - Mastery

Standard 3

Technology for Productivity Applications

Students learn the operations of technology through the usage of technology and productivity tools.

Benchmark A: Understand computer and multimedia technology concepts and communicate using the correct terminology.		
Skills	Level	Comments
Learn and use new technology terminology based on the computer and multimedia technology resources being used.	C	
Define technological terms as discovered.	C	

Benchmark B: Use appropriate tools and technology resources to complete tasks and solve problems.		
Skills	Level	Comments
Explain how input and output devices operate and interact with computers and multimedia technology resources.	C	
Demonstrate ability to login and use basic network services.	C	
Discuss different software programs and what they do.	C	
Discuss image formats (JPEG, GIF, TIFF).	C	
Save, transport and access stored information from portable devices - portable hard drives - universal serial bus—USB devices - memory sticks - CD/RW and DVD/RW	I	
Demonstrate how technology productivity tools can be used to help understand data.	I	
Collect/create digital images and sounds related to a particular topic. - Digital Camera - Scanner - Sound Recorder	I	
Demonstrate appropriate keyboarding skills.	C	

Benchmark C: Use productivity tools to produce creative works and prepare publications.		
Skills	Level	Comments
Use productivity tools and peripherals to increase skills and facilitate learning throughout the curriculum.	I	
Use technology resources for collaborating and brainstorming ideas (e.g., using concept-mapping programs in groups). SMART Ideas	C	
Use media and technology resources for presenting information - Projectors - Video cameras - DVD	I	

Standard 4

Technology and Communication Applications

Students use an array of technologies and apply design concepts to communicate with multiple audiences, acquire and disseminate information, and enhance learning.

Benchmark A: Identify the concepts and operations of communication systems.		
Skills	Level	Comments
Collect and evaluate examples of good design (contrast, size, arrangement) in print and electronic media.	I	
Investigate online learning environments • online courses • distance learning • video-conferencing • productions	C	
Contribute to real time classroom technology communication sessions.	C	

Benchmark B: Develop, publish and present information in print and digital formats.		
Skills	Level	Comments
Organize presentations by using storyboarding techniques.	I	
Construct information by using a variety of software applications.	C	
Edit digital images using photo editing software • crop • enhance brightness and/or contrast • adjust color • resize	I	
Generate a document that includes graphics from more than one source (e.g., find images that match assignment needs and insert them into a document).	I	
Develop a slide show using graphics, text and audio from more than one source (e.g., create a presentation about Ohio government with text, pictures and music or narration).	I	
Present information in a class video project.	I	
Identify the proper structure and components of e-mail: - a Address structure; - b Signature line; - c Subject line - d Body of message	I	
Use e-mail to share information.	C	

Benchmark C: Use technology communications to participate in online group collaborative interactive projects and activities.		
Skills	Level	Comments
Compose, send, receive and reply to e-mail	I	
Present and receive information in teacher/student directed online learning or video-conferencing activities (e.g., government agencies, historical society or museum).	I	

Standard 5

Technology and Information Literacy

Students engage in information literacy strategies, use the Internet, technology tools and resources, and apply information-management skills to answer questions and expand knowledge.

Benchmark A:

Describe types of information: facts, opinions, primary/secondary sources; and formats of information: number, text, sound, visual, multimedia; and use information for a purpose.

Skills	Level	Comments
Collect information (organized data and facts) and data (raw facts and figures) and identify answers to questions (e.g., locate data in a newspaper article, identify information on a sign).	C	
Discuss and define the difference between fact and opinion (e.g., the cafeteria served pizza today—fact, the pizza was good—opinion).	C	
Identify ways information can be presented (e.g., text, visual information on a map, information displayed in pictures or as graphics).	C	
Use primary source material to describe a person, place, thing or event (e.g., oral history, diary entries, photos, etc.).	I	

Benchmark B:

Use technology to find information, applying a research process to decide what information is needed, find sources, use information and check work

Skills	Level	Comments
Determine questions to be answered by research.	C	
Identify search terms for identified questions: author, title, subject, keyword.	C	
Select needed information from a defined group of resources: library catalog, online encyclopedia and subject list of age appropriate Web sites.	I	
Record and organize information gathered from selected resources to generate a product.	I	
Construct a list of the sources used in creating the project: author, title of source and date.	C	
Evaluate the product to determine if the research questions were answered.	I	

Benchmark C:

Use the Internet to find, use and evaluate information.

Skills	Level	Comments
Choose a search engine or directory specifically designed for students to locate information on the Internet.	I	
Type a simple search term in the search engine or directory to find facts and answer questions	C	
Read the list of results from the search engine or directory to locate potential Web sites relevant to the search topic.	C	
Choose a Web site and examine the information for facts by identifying information on the Web site • Author • Title • Date • Available products, services or resources • Special features (images, puzzles, activities)	I	

Benchmark D:

Identify, access and use electronic resources from both free and fee-based Internet sources.

Skills	Level	Comments
Demonstrate use of online fee-based (subscription or pay per use) electronic resources (e.g., state and/or district provided resources such as magazine databases, encyclopedias, dictionaries). • InfoOhio • Unitest Streaming • Online Encyclopedias	C	
Use a subscription resource or database (fee-based or pay-for-use) to locate information for a curricular need (e.g., select the subscription resource based on the curricular need). • InfoOhio • Unitest Streaming • Online Encyclopedias	C	