

## Ohio Technology Learning Standards

**STRAND: Information and Communications Technology**

The understanding and application of digital learning tools for accessing, creating, evaluation, applying and communicating ideas and information.

Topic 1: Identify and use appropriate digital learning tools and resources to accomplish a defined task.

K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
		<ul style="list-style-type: none"> <li><input type="checkbox"/> Develop basic skills for using digital learning tools and resources to accomplish a defined task.</li> <li><input type="checkbox"/> With guidance, identify a goal and determine how digital learning tools can help accomplish that goal.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> With guidance, identify and use digital learning tools or resources to support planning, implementing and reflecting upon a defined task.</li> <li><input type="checkbox"/> Explain the use of selected digital learning tools and resources to support productivity and learning.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> With guidance, identify and use digital learning tools or resources to support planning, implementing and reflecting upon a defined task.</li> <li><input type="checkbox"/> Explain the use of selected digital learning tools and resources to support productivity and learning.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> With guidance, identify and use digital learning tools or resources to support planning, implementing and reflecting upon a defined task.</li> <li><input type="checkbox"/> Explain the use of selected digital learning tools and resources to support productivity and learning.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Develop criteria for selecting digital learning tools and resources to accomplish a defined task.</li> <li><input type="checkbox"/> Select and use digital learning tools or resources to support planning, implementing, and reflecting upon a defined task.</li> </ul>
		Resources: Google Apps for Education	Resources: Google Apps for Education - Research projects	Resources: Google Apps for Education	Resources: Google Apps for Education - Google Digital Skills	Resources: Google Apps for Education - Google Digital Skills

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Topic 2: Use digital learning tools and resources to locate, evaluate and use information

K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
			<input type="checkbox"/> Explain basic ideas of plagiarism and copyright.  <input type="checkbox"/> Use digital citation tools to cite sources with appropriate guidance.	<input type="checkbox"/> Explain basic ideas of plagiarism and copyright.  <input type="checkbox"/> Use digital citation tools to cite sources with appropriate guidance.	<input type="checkbox"/> Use appropriate search techniques to locate needed information using digital learning tools and resources.  <input type="checkbox"/> Use multiple criteria developed with guidance to differentiate between relevant and irrelevant information found with digital learning tools and resources.  <input type="checkbox"/> Explain basic ideas of plagiarism and copyright.  <input type="checkbox"/> Use digital citation tools to cite sources with appropriate guidance.	<input type="checkbox"/> Use advanced search techniques to locate needed information using digital learning tools and resources.  <input type="checkbox"/> Use multiple criteria to evaluate the validity of information found with digital learning tools and resources.  <input type="checkbox"/> Apply principles of copyright, use digital citation tools and use strategies to avoid plagiarism.
			Resources: Technology Safety Lessons during Library	Resources: Technology Safety Lessons during Library	Resources: Son of Citation, Digital Citizenship via Common Sense, Search Techniques, Google Digital Skills for relevant vs irrelevant information	Resources: Son of Citation, Digital Citizenship via Common Sense , Advanced Search Techniques, Principles of copyright, Google Digital Skills

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Topic 3: Use digital learning tools and resources to construct knowledge

K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
					<ul style="list-style-type: none"><li><input type="checkbox"/> Interpret images, diagrams, maps, graphs, infographics, videos, animations, interactives, etc. in digital learning tools and resources to clarify and add to knowledge.</li><li><input type="checkbox"/> Create artifacts using digital learning tools and resources to demonstrate knowledge.</li></ul>	<ul style="list-style-type: none"><li><input type="checkbox"/> Analyze and integrate textual, visual, and quantitative information (images, diagrams, maps, graphs, infographics, videos, animations, interactives, etc.) from multiple digital learning tools and resources.</li><li><input type="checkbox"/> Create artifacts using digital learning tools and resources to demonstrate knowledge.</li></ul>
					Resources: Form creation and interpreting data (via Google Forms and Sheets)	Resources: Form creation and interpreting data (via Google Forms and Sheets) - Use Slides to present findings

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Topic 4: Use digital learning tools and resources to communicate and disseminate information to multiple audiences

K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
			<ul style="list-style-type: none"> <li><input type="checkbox"/> With guidance, discuss and identify communication needs considering goals, audience and content.</li> <li><input type="checkbox"/> With guidance, select media formats appropriate to content and audience.</li> <li><input type="checkbox"/> Evaluate the features of digital learning tools and resources based on the characteristics of a specific audience.</li> <li><input type="checkbox"/> Produce and publish information appropriate for a target audience using digital learning tools and resources.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> With guidance, discuss and identify communication needs considering goals, audience and content.</li> <li><input type="checkbox"/> With guidance, select media formats appropriate to content and audience.</li> <li><input type="checkbox"/> Evaluate the features of digital learning tools and resources based on the characteristics of a specific audience.</li> <li><input type="checkbox"/> Produce and publish information appropriate for a target audience using digital learning tools and resources.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> With guidance, discuss and identify communication needs considering goals, audience and content.</li> <li><input type="checkbox"/> With guidance, select media formats appropriate to content and audience.</li> <li><input type="checkbox"/> Evaluate the features of digital learning tools and resources based on the characteristics of a specific audience.</li> <li><input type="checkbox"/> Produce and publish information appropriate for a target audience using digital learning tools and resources.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Use digital learning tools and resources to identify communication needs considering goals, audience and content.</li> <li><input type="checkbox"/> Select and use a variety of media formats to communicate information to a target audience.</li> <li><input type="checkbox"/> Discuss and identify ways to communicate and disseminate information so that users with varied needs can access information.</li> </ul>
			Resources: Google Apps for Education	Resources: Google Apps for Education	Resources: Google Apps for Education	Resources: Google Apps for Education - Sites

STRAND: Society and Technology						
The interconnectedness of technology, self, society and the natural world, specifically addressing the ethical, legal, political and the global impact of technology.						
Topic 1: Demonstrate an understanding of technology's impact on the advancement of humanity- economically, environmentally, and ethically.						
K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
			<input type="checkbox"/> Demonstrate appropriate use of technology and explain the importance of responsible and ethical technology use.  <input type="checkbox"/> Describe legal and responsible practices when utilizing technology.	<input type="checkbox"/> Demonstrate appropriate use of technology and explain the importance of responsible and ethical technology use.  <input type="checkbox"/> Describe legal and responsible practices when utilizing technology.	<input type="checkbox"/> Demonstrate appropriate use of technology and explain the importance of responsible and ethical technology use.  <input type="checkbox"/> Describe legal and responsible practices when utilizing technology.	<input type="checkbox"/> Advocate and exhibit ethical, legal and responsible practices when utilizing technology.  <input type="checkbox"/> Review and demonstrate ethical considerations and legal requirements involved in the creation and use of digital technologies.
			Resources: Technology Safety Lessons during Library	Resources: Technology Safety Lessons during Library	Resources: Common Sense Media	Resources: Common Sense Media Google's Be Internet Awesome

STRAND: Society and Technology						
The interconnectedness of technology, self, society and the natural world, specifically addressing the ethical, legal, political and the global impact of technology.						
Topic 2: Analyze the impact of communication and collaboration in both digital and physical environments.						
K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
			<input type="checkbox"/> Exercise digital etiquette when communicating and collaborating.  <input type="checkbox"/> Identify the positive and negative impact the use of technology can have on relationships, communities and self.	<input type="checkbox"/> Exercise digital etiquette when communicating and collaborating.  <input type="checkbox"/> Identify the positive and negative impact the use of technology can have on relationships, communities and self.	<input type="checkbox"/> Create a plan and select collaboration and/or communication tools to complete a given task.  <input type="checkbox"/> Exercise digital etiquette when communicating and collaborating.  <input type="checkbox"/> Identify the positive and negative impact the use of technology can have on relationships, communities and self.	<input type="checkbox"/> Explain the positive and negative impact the use of technology can have on personal, professional and community relationships.  <input type="checkbox"/> Investigate how social media impacts society and the digital identities of individuals and organizations.
			Resources: Common Sense Media	Resources: Common Sense Media	Resources: Google Digital Skills Common Sense Media	Resources: Discussion Common Sense Media Resume Activity

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Topic 3: Explain how technology, society, and the individual impact one another						
K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
			<input type="checkbox"/> Identify and discuss how the use of technology affects self and others in various ways.  <input type="checkbox"/> Identify the components of your digital identity and your digital footprint.  <input type="checkbox"/> Identify and discuss laws and rules that apply to digital content and information.	<input type="checkbox"/> Demonstrate how technology innovations/inventions can have multiple applications.  <input type="checkbox"/> Identify and discuss how the use of technology affects self and others in various ways.  <input type="checkbox"/> Identify the components of your digital identity and your digital footprint.  <input type="checkbox"/> Identify and discuss laws and rules that apply to digital content and information.	<input type="checkbox"/> Identify and discuss how the use of technology affects self and others in various ways.  <input type="checkbox"/> Identify the components of your digital identity and your digital footprint.  <input type="checkbox"/> Identify and discuss laws and rules that apply to digital content and information.	<input type="checkbox"/> Manage components of your digital identity and your digital footprint.
			Resources: Library Tech Safety Lessons	Resources: Bloxels and Ozobot Lessons Library Tech Safety Lessons	Resources: Common Sense Media	Resources: Google Digital Skills

**STRAND: Design and Technology**

Addresses the nature of technology to develop and improve products and systems over time to meet human/societal needs and wants through design processes

Topic 1: Define and describe technology, including its core concepts of systems, resources, requirements, processes, controls, optimization and trade-offs

K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
			-	<input type="checkbox"/> Describe a process as a series of actions and how it is used to produce a result.	<input type="checkbox"/> Describe a process as a series of actions and how it is used to produce a result.	-
				Resources: Ozobot and Bloxels	Resources: Source: TBD	

**STRAND: Design and Technology**

Addresses the nature of technology to develop and improve products and systems over time to meet human/societal needs and wants through design processes

Topic 2: Identify a problem and use an engineering design process to solve the problem

K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
				<ul style="list-style-type: none"><li><input type="checkbox"/> Critique needs and opportunities for designing solutions.</li> <li><input type="checkbox"/> Plan and implement a design process: identify a problem, think about ways to solve the problem, develop possible solutions, test and evaluate solution(s), present a possible solution, and redesign to improve the solution.</li> <li><input type="checkbox"/> Generate, develop, and communicate design ideas and decisions using appropriate terms and graphical representations.</li></ul>		
				Resources: Ozobot and Bloxels		

**STRAND: Design and Technology**  
 Addresses the nature of technology to develop and improve products and systems over time to meet human/societal needs and wants through design processes

**Topic 3: Demonstrate that solutions to complex problems require collaboration, interdisciplinary understanding, and systems thinking**

K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
				<input type="checkbox"/> Design a product with multiple components and describe how the components interact to form a system.	<input type="checkbox"/> Design a product with multiple components and describe how the components interact to form a system.	
				Resources: Bloxels	Resources: Source: TBD	

**STRAND: Design and Technology**  
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**Topic 4: Evaluate designs using functional, aesthetic and creative elements**

K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
				<input type="checkbox"/> Use criteria developed with guidance to evaluate a new or improved product for its functional, aesthetic and creative elements.		
				Resources: Bloxels		