

Ohio's Learning Standards for Technology

KINDERGARTEN - 2nd GRADE

STRAND 1: Information and Communications Technology The understanding and application of digital learning tools for accessing, creating, evaluating, applying and communicating ideas and information.

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

<u>STANDARD</u>	<u>RESOURCES</u>
Develop basic skills for using digital learning tools and resources to accomplish a defined task.	Learning.com Abcya - story & slideshows Code & Go Mouse Code Programs (Kodable / Code.org) Snap Circuits Osmo
With guidance, identify a goal and determine how digital learning tools can help accomplish that goal.	Learning.com Code Programs (Kodable / Code.org) Abcya - story & slideshows Code & Go Mouse Osmo

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

<u>STANDARD</u>	<u>RESOURCES</u>
Develop basic skills for locating information using digital learning tools and resources.	Google Search Research Projects Learning.com
Identify main ideas and details in information found with digital learning tools and resources.	Learning.com Myon Google research

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

<u>STANDARD</u>	<u>RESOURCES</u>
Develop basic skills for gathering and organizing information from multiple digital learning tools and resources to build knowledge.	Google Search / Docs
Use visuals found in digital learning tools and resources to clarify and add to knowledge	Google Docs / Slides / Classroom
Collect, record and organize observations and data during student explorations using digital learning tools and resources.	Google Docs - Table
With guidance, create artifacts using digital learning tools and resources to demonstrate knowledge.	Google Docs / Slides Holiday projects - abcya Slideshow projects - abcya

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

<u>STANDARD</u>	<u>RESOURCES</u>
With guidance, discuss and identify communication needs considering the task, situation and information to be shared.	Google Docs / Slides / Classroom Keva Planks Snap Circuits Code Programs (Kodable / code.org)
With guidance, use digital learning tools to add audio and/or visual media to clarify information.	Google Slides - add images, videos
With guidance, select appropriate digital learning tools and resources to produce and publish information.	Google Docs / Slides Abcya - slideshow projects

STRAND 2: Society and Technology The interconnectedness of technology, self, society and the natural world, specifically addressing the ethical, legal, political and global impact of technology.

- **Topic 1: Demonstrate an understanding of technology’s impact on the advancement of humanity – economically, environmentally and ethically.**

<u>STANDARD</u>	<u>RESOURCES</u>
Demonstrate appropriate and identify inappropriate uses of technology required to be a responsible user.	Learning.com Common Sense Media Nearpod
Identify positive and negative impacts your use of technology can have on you and your family.	Learning.com Common Sense Media Nearpod

- **Topic 2: Analyze the impact of communication and collaboration in both digital and physical environments.**

<u>STANDARD</u>	<u>RESOURCES</u>
Communicate and collaborate using several digital methods.	Google Docs / Slides / Classroom Osmo
Identify positive and negative ways of collaborating in digital and physical environments.	Learning.com Common Sense Media Nearpod
Investigate how technology does (or does not) impact the way(s) your family communicates.	Learning.com Common Sense Media Nearpod

- **Topic 3: Explain how technology, society, and the individual impact one another.**

<u>STANDARD</u>	<u>RESOURCES</u>
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State the advantages/disadvantages of technology in your life	Learning.com Common Sense Media Nearpod
Identify examples of how technology innovations/inventions can have multiple applications.	Learning.com Myon
Identify how the use of technology affects self and others in various ways.	Learning.com Common Sense Media Nearpod
Define and discuss digital identity and digital footprints.	Learning.com Common Sense Media Nearpod
Provide examples of how rules for respecting others' belongings apply to digital content and information.	Learning.com Common Sense Media Nearpod

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.

<u>STANDARD</u>	<u>RESOURCES</u>
Identify and discuss differences between the human-designed world and the natural world.	Learning.com Myon
Describe technology as something someone made to meet a want or need.	Learning.com Myon
Explain that systems have parts or components that work together to accomplish a goal.	Coding Programs (Kodable / code.org) Keva Planks Snap Circuits Tinker Materials Marble Run / Create a Maze Osmo
Give examples of how resources such as tools and materials are things that help people get a job done.	Keva Planks Snap Circuits Tinker Materials Marble Run / Create a Maze Osmo

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

<u>STANDARD</u>	<u>RESOURCES</u>
Observe and describe details of an object's design.	Keva Planks Snap Circuits

	Tinker Materials Code & Go Mouse Osmo
Demonstrate the ability to follow a simple design process: identify a problem, think about ways to solve the problem, develop possible solutions, and share and evaluate solutions with others.	Coding Programs Snap Circuits Code & Go Mouse Tinker Materials Osmo
Explain that the design process is a plan to find solutions to problems.	Coding Programs Keva Planks Snap Circuits Tinker Materials
Demonstrate that there are many possible solutions to a design problem.	Coding Programs Keva Planks Tinker Materials Snap Circuits
Communicate design plans and solutions using drawings and descriptive language.	Google Docs / Slides / Classroom

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

<u>STANDARD</u>	<u>RESOURCES</u>
Describe how different technologies are used in various fields.	Learning.com Snap Circuits

	Code & Go Mouse
Work as a team to identify possible problems to solve and their potential technological solutions.	Coding Programs Keva Planks Tinker Materials Snap Circuits Code & Go Mouse Osmo

- **Topic 4: Evaluate designs using functional, aesthetic and creative elements.**

<u>STANDARD</u>	<u>RESOURCES</u>
Identify and discuss the use of aesthetics in everyday objects.	Keva Planks Snap Circuits Tinker Materials Osmo
Identify and discuss functional aspects of everyday objects	Keva Planks Snap Circuits Tinker Materials Osmo
Identify and discuss examples of creativity found in everyday objects.	Keva Planks Snap Circuits Tinker Materials Osmo
Discuss and give examples of how changes in design can be used to strengthen or improve a product.	Keva Planks Snap Circuits Osmo Tinker Materials