

# Course of Study:

## 2nd-Grade Technology



## 2nd-Grade Course of Study — Technology

**Strand:** Information and Communications Technology (Chromebook intro., word processing, Google Docs., Slides and Drawing, Coding-digital & physical).

<p><b>Learning Standard:</b></p> <p><b>Topic 1.a:</b> Develop basic skills for using digital learning tools and resources to accomplish a defined task.</p> <p><b>Topic 3.b:</b> Use visuals found in digital learning tools and resources to clarify and add to knowledge.</p> <p><b>Topic 3.c:</b> Collect, record and organize observations and data during student explorations using digital learning tools and resources.</p> <p><b>Topic 3.d:</b> With guidance, create artifacts using digital learning tools and resources to demonstrate knowledge.</p> <p><b>Topic 4.a:</b> With guidance, discuss and identify communication needs considering the task, situation and information to be shared.</p> <p><b>Topic 4.b:</b> With guidance use digital learning tools to add audio and/or visual media to clarify information.</p> <p><b>Topic 4.c:</b> With guidance, select appropriate digital learning tools and resources to produce and publish information.</p> <p><a href="#">Integration of Knowledge and Ideas (ELA)</a></p> <p>W.2.6 With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.</p>	<p><b>How Taught?</b> Modeling, <a href="#">Chromebook login</a>, <a href="#">Taking Care of Your Chromebook</a>, <a href="#">Google Classroom &amp; bookmarks</a>, <a href="#">Google tools assessment</a></p> <p>code.org course C: <a href="#">Code Login</a>, <a href="#">Hour of Code intro.</a>, <a href="#">Friendly letter practice</a>, <a href="#">Friendly letter intro.</a></p> <p><a href="#">Digital book project</a> tie in with Wit &amp; Wisdom using Google Slides.</p> <p><a href="#">Cup stacking</a></p> <p><a href="#">Loops</a></p> <p><a href="#">Code Event Controller lesson</a></p> <p><a href="#">Butterfly Slides project</a></p>
<p><b>Materials:</b> Chromebooks, Google Documents, Google Slides, Friendly letter format and age appropriate websites to reinforce skills.</p>	<p><b>How Assessed?</b> Discussion, observation, completion and quality of tasks.</p> <p><b>How Re-Taught?</b> Repetition, reinforcement through weekly application.</p>

## 2nd-Grade Course of Study — Technology

**Strand:** Society and Technology (Internet Safety)

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

<p><b>Learning Standard: Topic 1.a:</b> Demonstrate appropriate and identify inappropriate uses of technology required to be a responsible user.</p> <p><b>Topic 1.b</b> Identify positive and negative impacts one’s use of technology can have on oneself and one’s family.</p> <p><b>Topic 1.c:</b> Explain that systems have parts or components that work together to accomplish a goal.</p> <p><b>Topic 2.b:</b> Identify positive and negative ways of collaborating in digital and physical</p> <p><b>Topic 3.a:</b> State the advantages and disadvantages of technology in one;s life.</p> <p><b>Topic 3.b:</b> Identify examples of how technology innovations / inventions can have multiple applications.</p> <p><b>Topic 3.d</b> Define and discuss digital identity and digital footprints.</p> <p><b>Topic 3.e</b> Provide examples of how rules for respecting others’ belongings apply to digital content and information.</p>	<p><b>How Taught?</b></p> <p><a href="#">Internet Safety review</a>, <a href="#">Internet safety presentation</a>, <a href="#">Internet Safety Checklist</a>, <a href="#">Into the Clouds season 2</a> <a href="#">Safety Slides - Code.org Course C</a> <a href="#">Choose the right App</a>, <a href="#">STEM</a> - creating tools</p>
<p><b>Materials:</b> Netsmartz videos &amp; curriculum, STEM materials</p>	<p><b>How Assessed?</b> Discussion, observation, completion of tasks.</p> <p><b>How Re-Taught?</b> Repetition, reinforcement.</p>

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### Strand: Design and Technology (STEM activities)

<p><b>Learning Standard:</b></p> <p><b>Topic 1.b:</b> Describe technology as something someone made to meet a want or need. such as tools and materials are things that help people get a job done</p> <p><b>Topic 1.c:</b> Explain that systems have parts or components that work together to accomplish a goal.</p> <p><b>Topic 1.d:</b> Give examples of how resources such as tools and materials are things that help people get a job done</p> <p><b>Topic 2.a:</b> Observe and describe details of an object's design.</p> <p><b>Topic 2.b:</b> Demonstrate the ability to follow a simple design process: identify a problem</p> <p><b>Topic 2.c:</b> Explain that a design process is a plan to find solutions to problems.</p> <p><b>Topic 2.d:</b> Demonstrate that there are many possible solutions to a design problem.</p> <p><b>Topic 2.e:</b> Communicate design plans and solutions using drawings and descriptive language.</p> <p><b>Topic 3.a:</b> Describe how different technologies are used in various fields.</p> <p><b>Topic 4.d:</b> Discuss and give examples of how changes in design can be used to strengthen or improve a product.</p>	<p><b>How Taught?</b> Introduction to design through STEM activities</p> <p><a href="#">STEM career video</a></p> <p><a href="#">Bridge Challenge</a></p> <p><a href="#">Circuits</a>, <a href="#">Electrical circuits</a>, <a href="#">Magtronix Forces</a>,</p> <p><a href="#">Basic engineering</a></p> <p><a href="#">Wheel of engineering</a></p>
<p><b>Materials:</b></p> <p>STEM materials, Magtronix starter &amp; expansion kits.</p> <p><a href="#">Wheel of materials (Munson)</a> <a href="#">(Park)</a></p>	<p><b>How Assessed?</b> Testing products to see if they meet objectives.</p> <p><b>How Re-Taught?</b> Redefine prototypes with teacher guidance</p>