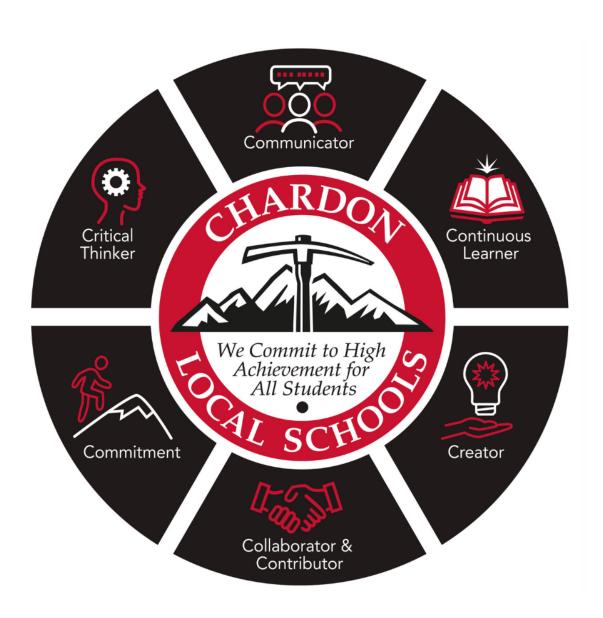
# Course of Study: 2nd-Grade Technology



## 2nd-Grade Course of Study — Technology

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

## **Learning Standard:**

**Topic 1.a:** Develop basic skills for using digital learning tools and resources to accomplish a defined task.

**Topic 3.b:** Use visuals found in digital learning tools and resources to clarify and add to knowledge.

**Topic 3.c**: Collect, record and organize observations and data during student explorations using digital learning tools and resources.

**Topic 3.d:** With guidance, create artifacts using digital learning tools and resources to demonstrate knowledge.

**Topic 4.a:** With guidance, discuss and identify communication needs considering the task, situation and information to be shared.

**Topic 4.b:** With guidance use digital learning tools to add audio and/or visual media to clarify information.

**Topic 4.c:** With guidance, select appropriate digital learning tools and resources to produce and publish information.

Integration of Knowledge and Ideas (ELA)

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.

How Taught? Modeling, Chromebook login,

Taking Care of Your Chromebook, Google

Classroom & bookmarks

Google tools assessment

code.org course C: Code Login,

**Hour of Code intro.** 

Friendly letter practice, Friendly letter intro.

**Digital book project** tie in with Wit & Wisdom using Google Slides.

**Cup stacking** 

Loops

**Code Event Controller lesson** 

**Butterfly Slides project** 

**Materials:** Chromebooks, Google Documents, Google Slides, Friendly letter format and age appropriate websites to reinforce skills.

**How Assessed?** Discussion, observation, completion and quality of tasks.

**How Re-Taught?** Repetition, reinforcement through weekly application.

1

## 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

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

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

## **Learning Standard:**

**Topic 1.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

**Topic 1.c:** Explain that systems have parts or components that work together to accomplish a goal.

**Topic 1.d:** Give examples of how resources such as tools and materials are things that help people get a job done

**Topic 2.a:** Observe and describe details of an object's design.

**Topic 2.b:** Demonstrate the ability to follow a simple design process: identify a problem

**Topic 2.c:** Explain that a design process is a plan to find solutions to problems.

**Topic 2.d:** Demonstrate that there are many possible solutions to a design problem.

**Topic 2.e:** Communicate design plans and solutions using drawings and descriptive language.

**Topic 3.a:** Describe how different technologies are used in various fields.

**Topic 4.d:** Discuss and give examples of how changes in design can be used to strengthen or improve a product.

**How Taught?** Introduction to design through

STEM activities

STEM career video

**Bridge Challenge** 

Circuits, Electrical circuits, Magtronix

Forces.

**Basic engineering** 

Wheel of engineering

#### **Materials:**

STEM materials, Magtronix starter & expansion kits.

Wheel of materials (Munson) (Park)

**How Assessed?** Testing products to see if they meet objectives.

**How Re-Taught?** Redefine prototypes with teacher guidance