Computational Thinking (CT) - Grades K-2

CT.1.1: Recognize that software is required to control all computing devices. Students explore the basics of circuit components and how they work together, similar to software controlling devices.

CT.2.4: Analyze age-appropriate data and look for similarities in order to identify patterns and categories.

CT.2.5: Identify a problem and select appropriate technology tools to explore and find solutions. Students evaluate challenges faced during activities and apply their knowledge to solve them.

Digital Literacy (DL) - Grades K-2

DL.1.1: Navigate a variety of technologies that will help them in their learning. Students use Snap Circuit kits, learning to navigate and understand the technology involved.

Idaho Content Science Standards

[Science Content Standards (idaho.gov)](#)

Physical Science

1-PS-1.1: Students who demonstrate understanding can plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate. This ties into the exploration of circuits as students will experiment with how electricity (like sound) can make components respond or vibrate in a circuit.

1-PS-1.2: Students who demonstrate understanding can analyze data from tests of a proposed object or tool to determine if it works as intended. Students will analyze the effectiveness of their circuit designs, testing and critiquing their work to ensure it functions as intended.

Life Science

1-LS-1.1: Students who demonstrate understanding can use observations to describe patterns in the natural world. While this standard is about natural patterns, students can observe and describe patterns in how circuits operate and respond under different configurations.

Overview: 1st grade

Technology Standards: CT.1.1, CT.2.4, CT.2.5, DL.1.1
Idaho Science Standards: 1-PS-1.1, 1-PS-1.2, 1-LS-1.1

2nd Grade
Technology Standards
[K-8 Technology Standards | Idaho Department of Education](#)

Computational Thinking (CT) - Grades K-2

CT.1.1: Recognize that software is required to control all computing devices. Students explore the basics of circuit components and how they work together, similar to software controlling devices.

CT.2.4: Analyze age-appropriate data and look for similarities in order to identify patterns and categories.

CT.2.5: Identify a problem and select appropriate technology tools to explore and find solutions. Students evaluate challenges faced during activities and apply their knowledge to solve them.

Digital Literacy (DL) - Grades K-2

> **DL.1.1**: Navigate a variety of technologies that will help them in their learning. Students use Snap Circuit kits, learning to navigate and understand the technology involved.

Idaho Content Science Standards
Science Content Standards (idaho.gov)

Physical Science

> **2-PS-1.1**: Students who demonstrate understanding can plan and conduct an investigation to describe and classify different kinds of materials by their observable properties. Students will classify circuit components (e.g., wires, batteries, lights) based on their properties and functions during the Snap Circuit activities.

Life Science

> **2-LS-1.1**: Students who demonstrate understanding can plan and conduct an investigation to determine how the external structures and functions of animals and plants support survival and growth. While primarily focused on biology, this standard can be adapted to explore how different electrical components work together, paralleling the interdependence of external structures in living organisms.

Overview: 2nd grade
> Technology Standards: CT.1.1, CT.2.4, CT.2.5, DL.1.1
> Idaho Science Standards: 2-PS-1.1, 2-LS-1.1

3rd Grade
Technology Standards
K-8 Technology Standards | Idaho Department of Education

Computational Thinking (CT) - Grades 3-5

> **CT.1.1** Identify, using accurate terminology, simple hardware and software problems and apply strategies for solving these problems.

> **CT.1.4** Create original works and learn strategies for remixing or repurposing to create new artifacts.

> **CT.2.3** Collect feedback from both people and features embedded in digital tools and use age-appropriate technology to share learning.

> **CT.2.6** Navigate age-appropriate technologies and begin to transfer their learning to different tools or learning environments.

> **CT.3.5** Choose tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.

Digital Literacy (DL) - Grades 3-5

> DL.3.1 Identify how computational devices impact daily life.

Physical Science

3-PS-1.1: Students who demonstrate understanding can plan and conduct an investigation to provide evidence that the motion of an object is affected by the forces acting on it. In circuit building, students explore how the flow of electricity can be seen as a form of force and how different configurations can affect circuit operation.

Life Science

3-LS-1.1: Students who demonstrate understanding can develop and use a model to describe the role of organisms in an ecosystem. This can be related to how various components in a circuit work together as part of a larger system, similar to how organisms interact within an ecosystem.

Overview: 3rd grade
Technology Standards: CT.1.1, CT.1.4, CT.2.3, CT.2.6, CT.3.5, DL.3.1
Idaho Science Standards: 3-PS-1.1, 3-LS-1.1