



# Sedalia School District #200

**Level:** Elementary

**Subject Area:** PLTW (Science)

**Unit/Grade:** Module 1 -1st grade

## Essential Questions:

1. Why it important to be able to communicate over long distances?
2. Why is sound important to our everyday lives?

### Pacing

### Priority Standards (Missouri Learning Standards and Show-Me Standards)

### Big Idea

### I CAN statements

First Quarter

#### Module 1: Light and Sound

Aug. 27-  
Oct. 18

**1.PS4.A.1** Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.

**1.PS4.C.1** Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.

[Missouri Learning Standards](#)  
[Show Me Standards](#)

All products created by designers and engineers were created to meet a human need or want. One of the most basic of human needs is to communicate over a distance. In this module, students investigate light and sound, including vibration from sound waves and the effect of different materials on the path of a beam of light. The students use a design process to sketch, build, test, and reflect on a device that uses light or sound to communicate over a distance.

- I can evaluate a problem in a novel situation.
- I can apply a step by step design process to solve a problem.
- I can communicate over a distance using
- light or sound.



# Sedalia School District #200

**Level:** Elementary

**Subject Area:** Science

**Unit/Grade:** G2 Unit 4 - 1st Grade

## Essential Questions:

1. Why is it important to protect the Earth's water?

### Pacing

### Priority Standards (Missouri Learning Standards and Show-Me Standards)

### Big Idea

### I CAN statements

Second  
Quarter

**G2**  
**UNIT 4:**  
**Earth's Surface**

Oct. 21-  
Dec. 20

**1.ESS.2.C** Obtain information to identify where water is found on Earth and that it can be solid or liquid.

[Missouri Learning Standards](#)  
[Show Me Standards](#)

Water can be found on Earth in the solid and liquid form. Water also needs to be conserved and protected. Maps show drawings or models where things are located such as different types of land and bodies of water. Parts of a map include map title, map key, and compass rose.

- I can create a model to represent the shapes and kinds of land and bodies of water in an area.
- I can gather information to identify where water is found on Earth and that it can be solid or liquid.



# Sedalia School District #200

**Level:** Elementary                      **Subject Area:** PLTW (Science)                      **Unit/Grade:** Module 4 - 1st Grade

**Essential Questions:**

1. What does technology let me do that I can't do without using technology?
2. What strategies can I use so that I don't become frustrated if my program isn't working right?

Pacing	Priority Standards (Missouri Learning Standards and Show-Me Standards)	Big Idea	I CAN statements
<p>Second Quarter</p> <p><b>Module 4: Animated Storytelling</b></p> <p>Oct. 21- Dec. 20</p>	<p><b>1.ETS1.A.1</b> Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.</p> <p><b>1.ETS1.B.1</b> Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.</p> <p><b>1.ETS1.C.1</b> Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.</p> <p><a href="#">Missouri Learning Standards Show Me Standards</a></p>	<p>In this module, students develop the ability to create digital animated stories on a tablet. Students explore the sequential nature of computer programs through hands-on activities both with and without a computer. Applying skills and knowledge learned from activities in this module, students work in pairs to design and program a simple digital animated story that interacts with the reader.</p>	<ul style="list-style-type: none"> <li>• I can construct a sequence of steps to solve a simple problem.</li> <li>• I can persist when solving problems, exercising patience while iterating through testing and fixing the solution.</li> </ul>



# Sedalia School District #200

**Level:** Elementary                      **Subject Area:** Science                      **Unit/Grade:** G1 Unit 5 - 1st Grade

**Essential Questions:**

1. Why do plants and animals look similar and different from their parents?
2. How do animals take care of their young?

Pacing	Priority Standards (Missouri Learning Standards and Show-Me Standards)	Big Idea	I CAN statements
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<p>Third Quarter</p> <p><b>G1 UNIT 5: Living Things and Their Young</b></p> <p>Jan. 7- Mar. 13</p>	<p><b>1.LS3.A.1</b> Make observations to construct an evidence based account that young plants and animals are like, but not exactly like, their parents.</p> <p><a href="#">Missouri Learning Standards Show Me Standards</a></p>	<p>Adult plants and animals have similarities and differences from their young. Parents transfer traits to their young. Animals change as they grow.</p> <p>Animals take care of their young and there are behavioral patterns of parents and offspring that help offspring get food.</p>	<ul style="list-style-type: none"> <li>• I can make observations to explain the differences and similarities between plant parents and their offspring.</li> <li>• I can make observations to explain the differences and similarities between animal parents and their offspring.</li> <li>• I can determine patterns in how animal parents and offspring behave in ways that help the offspring survive.</li> </ul>
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# Sedalia School District #200

**Level:** Elementary                      **Subject Area:** PLTW (Science)                      **Unit/Grade:** Module 3 - 1st Grade

**Essential Questions:**

1. How are different organisms adapted to their environment?
2. Why is it important that humans can adapt to different environments?

Pacing	Priority Standards (Missouri Learning Standards and Show-Me Standards)	Big Idea	I CAN statements
<p>Third Quarter</p> <p><b>Module 3: Animal Adaptations</b></p> <p>Jan. 7- Mar. 13</p>	<p><b>1.LS1.A.1</b> Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.</p> <p><a href="#">Missouri Learning Standards Show Me Standards</a></p>	<p>Students learn what it means for an organism to be adapted to its environment and how different adaptations can be categorized. Through various investigations, students explore an example of adaptations for protection, camouflage, food, and locomotion.</p>	<ul style="list-style-type: none"> <li>• I can use knowledge of animal adaptations in a given environment to inform decisions about what humans need to do to adapt to that same environment.</li> <li>• I can apply a step by step process to design and perform investigations to find answers to questions.</li> <li>• I can utilize critical thinking skills to solve a problem.</li> </ul>



# Sedalia School District #200

**Level:** Elementary                      **Subject Area:** PLTW (Science)                      **Unit/Grade:** Module 2 - 1st Grade

**Essential Questions:**

1. How does the sun impact the Earth?
2. Why is it important to learn about patterns of the sun, moon, and stars?

Pacing	Priority Standards (Missouri Learning Standards and Show-Me Standards)	Big Idea	I CAN statements
<p>Fourth Quarter</p> <p><b>Module 2: Light: Sun, Moon, and Stars</b></p> <p>Mar. 23- May 21</p>	<p><b>1.ESS1.A.1</b> Describe the presence of the Sun, Moon, and stars in the sky over time.</p> <p><b>1.ESS1.A.2</b> Use observations of the sun, moon, and stars to describe patterns that can be predicted.</p> <p><a href="#">Missouri Learning Standards Show Me Standards</a></p>	<p>The primary source of light on Earth is the Sun. The Sun is the star at the center of our solar system. Students learn that stars, including the Sun, generate their own light, while objects such as the moon reflect that light. The students will document patterns as they observe the Sun, moon, and stars.</p>	<ul style="list-style-type: none"> <li>• I can evaluate a problem in a novel situation.</li> <li>• I can apply a step-by-step design process to solve a problem.</li> <li>• I can identify patterns from observable data.</li> <li>• I can identify sources of light involved in viewing objects.</li> </ul>