

Content: Science	Grade or Course: First Grade	Date Developed: 5/16/2018
<p>Overview: In first grade, students are expected to develop understanding of the relationship between sound and vibrating materials as well as between the availability of light and ability to see objects. The idea that light travels from place to place can be understood by students at this level through determining the effect of placing objects made with different materials in the path of a beam of light. Students are also expected to develop understanding of how plants and animals use their external parts to help them survive, grow, and meet their needs as well as how behaviors of parents and offspring help the offspring survive. The understanding is developed that young plants and animals are like, but not exactly the same as, their parents. Students are able to observe, describe, and predict some patterns of the movement of objects in the sky. In the first grade performance expectations, students are expected to demonstrate grade-appropriate proficiency in planning and carrying out investigations, analyzing and interpreting data, constructing explanations and designing solutions, and obtaining, evaluating, and communicating information. Students are expected to use these practices to demonstrate understanding of the core ideas.</p>		
<p><u>Essential Questions:</u></p> <p>Physical Science Essential Questions:</p> <ul style="list-style-type: none"> ● What happens when materials vibrate? ● What happens when there is no light? <p>Life Science Essential Questions:</p> <ul style="list-style-type: none"> ● How do characteristics of animals' habitats help them survive? ● How are parents and their offspring different and the same? ● How do plants and animals obtain energy and use it for survival? ● How to humans affect animal habitats? <p>Earth Science Essential Questions:</p> <ul style="list-style-type: none"> ● How does sunlight affect living and nonliving things? ● How does weather affect our daily lives? ● How do we use natural resources to make manufactured products? ● Why is it important to recycle? 		
<p><u>EO's addressed to proficiency level:</u></p> <p>Asking Questions and Defining Problems-</p> <ol style="list-style-type: none"> A. Ask questions based on observations to find more information about the nature and/or designed worlds. B. Ask and/or identify questions that can be answered by an investigation. C. Define a simple problem that can be solved through the development of a new or improved object or tool. 		

Standards:

Waves: Light & Sound

- 1-PS4-1-Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.
- 1-PS4-2- Make observations to construct an evidence-based account that objects can be seen only when illuminated.
- 1-PS4-3-Plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light.
- 1-PS4-4. Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.

Structure, Function, and Information Processing

- 1-LS1-1. 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.
- 1-LS1-2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive
- 1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

Space Systems: Patterns and Cycles

- 1-ESS1-1. Use observations of the sun, moon, and stars to describe patterns that can be predicted.
- 1-ESS1-2. Make observations at different times of year to relate the amount of daylight to the time of year.

Units:

Light and Sound - Physical Science

Plants and Animals - Life Science

Space Systems: Patterns and Cycles - Earth Science

Assessments:

Light and Sound

Plants and Animals

Space