

FIRST GRADE SCIENCE

Science and Engineering Practices

- Asking Questions or Defining Problems
- Developing and Using Models
- Planning and Carrying Out Investigations
- Analyzing and Interpreting Data
- Using Mathematics and Computational Thinking
- Constructing Explanations and Designing Solutions
- Engaging in Argument from Evidence
- Obtaining, Evaluating, and Communicating Information

Seasons and Space Patterns: Seasonal patterns of the motion of the Sun, Moon, and star can be observed, described, and predicted depending of the region, location, or time of year.

- Obtain, evaluate, and communicate information about the movement of the Sun, Moon, and stars to describe predictable patterns.
- Obtain, evaluate, and communicate information about the patterns observed at different times of the year to relate the amount of daylight to the time of year.
- Design a device that measures the varying patterns of daylight.

The Needs of Living Things and Their Offspring: Living things have external features, that are similar but exactly like their parents, and behaviors that help them survive in their surroundings.

- Plan and carry out an investigation to determine the effect of sunlight and water on plant growth.
- Construct an explanation by observing patterns of external features of living things that survive in different locations.
- Obtain, evaluate, and communicate information about the patterns of plants and nonhuman animals that are alike, but not exactly like, their parents.
- Construct an explanation of the patterns in the behaviors of parents and offspring which help offspring to survive.

Light and Sound: Light and sound affect and interact with matter and both can be used to communicate over a distance.

- Plan and carry out an investigation to show the cause and effect relationship between sound and vibrating matter.
- Use a model to show the effect of light on objects.
- Plan and carry out an investigation to determine the effect of materials in the path of a beam of light.
- Design a device in which the structure of the device uses light or sound to solve the problem of communicating over a distance.

