

First Grade



Waves: Light and 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 the year to relate the amount of daylight to the time of year.

Engineering Design

- K-2-ETS1-1** 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.
- K-2-ETS1-2** 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.
- K-2-ETS1-3** Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.

*Refer to evidence statements in www.nextscience.org

(Adapted from Achieve. (2016, January 28), from <http://www.nextgenscience.org>)