

1st Grade Science

Physical Science PS

4 Waves and Their Applications in Technologies for Information Transfer PS4

- 1 Plan and carry out an investigation to provide evidence that vibrating materials can make sound and that sound can make materials vibrate. (SEP: 3; DCI: PS4.A; CCC: Cause/Effect) 1-PS4-1
- 2 Construct an evidence-based account for how objects can be seen only when illuminated. (SEP: 6; DCI: PS4.B; CCC: Cause/Effect) 1-PS4-2
- 3 Plan and carry out an investigation to determine the effect of placing objects made with different materials in the path of a beam of light. (SEP: 3; DCI: PS4.B; CCC: Cause/Effect) 1-PS4-3
- 4 Design and build a device that uses light or sound to solve the problem of communicating over a distance. (SEP: 6; DCI: PS4.C, ETS1.B; CCC: Cause/Effect)
Alignment may include K-2-ETS1-2 1-PS4-4

Life Science LS

1 From Molecules to Organisms: Structures and Processes LS1

- 1 Construct an explanation and 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. (SEP: 6; DCI: LS1.A, LSI.D, ETS1.A; CCC: Structure/Function)
Alignment may include K-2-ETS1-1 1-LS1-1
- 2 Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive. (SEP: 8; DCI: LS1.B; CCC: Patterns) 1-LS1-2

3 Heredity: Inheritance and Variation of Traits LS3

- 1 Construct an evidence-based account that young plants and animals are like, but not exactly like, their parents. (SEP: 6; DCI: LS3.A, LS3.B; CCC: Patterns) 1-LS3-1

Earth and Space Science ESS

1 Earth's Place in the Universe ESS1

- 1 Use observations of the sun, moon, and stars to describe patterns that can be predicted. (SEP: 4; DCI: ESS1.A; CCC: Patterns) 1-ESS1-1
- 2 Make observations and compare the amount of daylight at different times of the year. (SEP: 3; DCI: ESS1.B; CCC: Patterns) 1-ESS1-2

Engineering, Technology, and Applications of Science ETS

1 Engineering Design 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. Alignment may include K-PS2-2; K-ESS3-2; 1-LS1-1 **K-2-ETS1-1**
- 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. Alignment may include K-ESS3-3; 1-PS4-4; 2-LS2-2 **K-2-ETS1-2**
- 3 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs. Alignment may include 2-PS1-2; 2-ESS2-1 **K-2-ETS1-3**