

# First Grade

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

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

Make observations to construct an evidencebased account that objects in darkness can be seen only when illuminated. 1-PS4-2

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2 Make observations to construct an evidencebased account that objects in darkness can be seen only when illuminated. 1-PS4-2

Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light. 1-PS4-3

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3 Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light. 1-PS4-3

Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance. 1-PS4-4

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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. 1-PS4-4

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-

5 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-LS1-1

**Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.** 1-LS1-2

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**6 Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.** 1-LS1-2

**Make observations to construct an evidencebased account that young plants and animals are like, but not exactly like, their parents.** 1-LS3-1

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**7 Make observations to construct an evidencebased account that young plants and animals are like, but not exactly like, their parents.** 1-LS3-1

**Use observations of the sun, moon, and stars to describe patterns that can be predicted.** 1-ESS1-1

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**8 Use observations of the sun, moon, and stars to describe patterns that can be predicted.** 1-ESS1-1

**Make observations at different times of year to relate the amount of daylight to the time of year.** 1-ESS1-2

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**9 Make observations at different times of year to relate the amount of daylight to the time of year.** 1-ESS1-2

**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.** 1-ETS1-1

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**10 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.** 1-ETS1-1

**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.** 1-ETS1-2

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**11 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.** 1-ETS1-2

**Analyze data from tests of two objects designed**

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

**to solve the same  
problem to compare the  
strengths and  
weaknesses of how each  
performs.** 1-ETS1-3