

Grade 4

Adopted 2019

Energy

4-PS3-1. Use evidence to construct an explanation relating the speed of an object to the energy of that object. 4-PS3-1

4-PS3-2. Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents. 4-PS3-2

4-PS3-3. Ask questions and predict outcomes about the changes in energy that occur when objects collide. 4-PS3-3

4-PS3-4. Using the engineering design process build a device that converts energy from one form to another. 4-PS3-4

From Molecules to Organisms: Structures and Processes

4-LS1-1. Construct an argument that plants, and animals have internal and external structures that function to support survival, growth, behavior, and reproduction. 4-LS1-1

4-LS1-2. Form an explanation to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways. 4-LS1-2

Earth's Systems

4-ESS2-2. Analyze and interpret data from maps to describe patterns of Earth's features. 4-ESS2-2

Earth and Human Activity

4-ESS3-1. Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment. 4-ESS3-1

4-ESS3-2. Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans. 4-ESS3-2

Engineering & Technology

4-ET1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost. 4-ET1-1

4-ET1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. 4-ET1-2

4-ET1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved. 4-ET1-3

Waves and Their Applications in Technologies for Information Transfer

4-PS4-1. Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move. 4-PS4-1

4-PS4-3. Construct a code to convey information by researching past and present methods of transmitting information. 4-PS4-3

Earth's Place in the Universe

4-ESS1-1. Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time. 4-ESS1-1

Earth & Space Science

4-ESS2-1. Make observations and metric measurements to provide evidence of the effects of weathering and the rate of erosion by water, ice, wind, or vegetation. 4-ESS2-1