

Grade 4

Adopted 2017

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. Apply scientific ideas to design, test, and refine a device that converts energy from one form to another. [4-PS3-4](#)

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 to show that waves can cause objects to move. [4-PS4-1](#)

4-PS4-2. Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen. [4-PS4-2](#)

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. Construct an explanation to describe how animals receive different types of information through their senses, process the information in their brains, and respond to the information in different ways. [4-LS1-2](#)

Earth's Systems

4-ESS2-1. Plan and conduct investigations on the effects of water, ice, wind, and vegetation on the relative rate of weathering and erosion. [4-ESS2-1](#)

4-ESS2-2. Analyze and interpret data from maps to describe patterns of Earth's features. [4-ESS2-2](#)

4-ESS2-3. Ask questions that can be investigated and predict reasonable outcomes about how living things affect the physical characteristics of their environment. [4-ESS2-3](#)

Earth and Human Activity

4-ESS3-1. Obtain and combine information to describe that energy and fuels are derived from renewable and non-renewable resources and how 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

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 landforms over time. 4-ESS1-1