Oklahoma Science

Grade 6

Adopted 2020

Matter and Its Interactions	**4. Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.** 6.PS1.4
Energy	**3. Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.** 6.PS3.3
	4. Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample. 6.PS3.4
Waves and Their Applications in Technologies for Information Transfer	**2. Develop and use a model to describe that waves are reflected, absorbed, or transmitted through various materials.** 6.PS4.2
From Molecules to Organisms: Structure and Processes	**1. Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells.** 6.LS1.1
	2. Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function. 6.LS1.2
	3. Use an argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells. 6.LS1.3
	8. Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories. 6.LS1.8
Earth's Place in the Universe	**4. Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's geologic history.** 6.ESS1.4
Earth's Systems	**1. Develop a model to describe the cycling of Earth's materials and the flow of energy that drives these processes within and among Earth's systems.** 6.ESS2.1
	2. Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales. 6.ESS2.2

	3. **Analyze and interpret data on the patterns of distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.** 6.ESS2.3
	4. **Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.** 6.ESS2.4
	5. **Collect data to provide evidence for how the motions and complex interactions of air masses result in changes in weather conditions.** 6.ESS2.5
	6. **Develop and use a model to describe how unequal heating and rotation of the Earth causes patterns of atmospheric and oceanic circulation that determine regional climates.** 6.ESS2.6
Earth and Human Activity	2. **Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.** 6.ESS3.2