Power Indicators
Grade 5
Science

Earth and Space Sciences

5.1.2 Explain that Earth is one of several planets to orbit the sun, and that the moon orbits Earth.

5.1.5 Explain how the supply of many nonrenewable resources is limited and can be extended through reducing, reusing and recycling but cannot be extended indefinitely.

Life Sciences

5.2.3 Trace the organization of simple food chains and food webs (e.g., producers, herbivores, carnivores, omnivores and decomposers).

5.2.4 Summarize that organisms can survive only in ecosystems in which their needs can be met (e.g., food, water, shelter, air, carrying capacity and waste disposal). The world has different ecosystems and distinct ecosystems support the lives of different types of organisms.

5.2.5 Support how an organism's patterns of behavior are related to the nature of that organism's ecosystem, including the kinds and numbers of other organisms present, the availability of food and resources, and the changing physical characteristics of the ecosystem.

5.2.6 Analyze how all organisms, including humans, cause changes in their ecosystems and how these changes can be beneficial, neutral or detrimental (e.g., beaver ponds, earthworm burrows, grasshoppers eating plants, people planting and cutting trees and people introducing a new species).

Physical Sciences

5.3.1 Define temperature as the measure of thermal energy and describe the way it is measured.

5.3.3 Describe that electrical current in a circuit can produce thermal energy, light, sound and/or magnetic forces.

5.3.7 Describe that changing the rate of vibration can vary the pitch of a sound.

Science and Technology

5.4.1 Investigate positive and negative impacts of human activity and technology on the environment.

Scientific Inquiry

5.5.1 Select and safely use the appropriate tools to collect data when conducting investigations and communicating findings to others (e.g., thermometers, timers, balances, spring scales, magnifiers, microscopes and other appropriate tools).

5.5.6 Explain why results of an experiment are sometimes different (e.g., because of unexpected differences in what is being investigated, unrealized differences in the methods used or in the circumstances in which the investigation was carried out, and because of errors in observations).

Scientific Ways of Knowing

5.6.3 Explain why an experiment must be repeated by different people or at different times or places and yield consistent results before the results are accepted.

5.6.5 Keep records of investigations and observations that are understandable weeks or months later.