

Third Grade

ALL FOUR KITS

Science Processes: Inquiry Process, Inquiry Analysis and Communication, Reflection, and Social Implications

Students continue building their inquiry and investigation skills through the use of observations and data collection. This learning requires using measurement with appropriate units of measure and conducting simple and fair investigations. Students use their data as evidence to separate fact from opinion, and compare and contrast different sets of data from multiple trials. In the application of what students discover through their investigations, they begin to describe the effect of humans and other organisms on the balance of the natural world and how people contribute to the advancement of science.

The content expectations for third grade science students presents high interest content that leads to investigations, data collection, raising questions and the identification of current problems in the environment that society faces on Earth.

Kit: CHANGES IN MOTION

The previous grades have provided the students with an introduction to the understanding of motion (kindergarten), and properties of matter (first grade and second grade). The study of motion asks for students to compare and contrast motion in terms of direction and speed of an object. Using force as a push or a pull from the kindergarten expectations, now builds toward the idea that when an object does not move in response to a force, it is because another force is acting on it. The force of gravity as the force that pulls objects towards the Earth is the foundation of this learning.

Kit: LIGHT AND SOUND

The third grade science content expectations introduce the concept of energy through the study of light and sound. Students explore light and how light travels in a straight path, how shadows are made, and the behavior of light through water. Students discover that different objects interact differently with light; objects can reflect, absorb, or refract light. Objects can also absorb heat energy when exposed to light. Properties of sound are also introduced in the third grade curriculum. Students are given the opportunity to explore how different pitches are produced and sound as a result of vibrations.

Kit: STRUCTURE AND FUNCTION OF LIVING THINGS

The third grade life science curriculum combines the previous studies of animals and plants from the first and second grades. These studies build toward an understanding of the complex interactions among living and nonliving things and the diversity of life. Children explore the functions of structures in plants and animals that help them to survive in their environment, establish the initial association of organisms within their environments, and develop ideas regarding the dependence of living things on various aspects of behavior within their environment.

Kit: EARTH MATERIALS, CHANGES AND RESOURCES

Initially, the third grade students explore natural causes of change on the Earth's surface, different types of earth materials (rocks, minerals, clay, boulders, gravel, sand, and soil), and identify those materials used to construct common objects. The skills students need to understand and apply their scientific knowledge and develop an awareness of the effects of humans and other organisms on the environment are a primary focus in the third grade Earth science instruction. Students explore natural resources (renewable and non-renewable), and describe how humans protect and harm the environment. Children are asked to employ causal reasoning between human activities and the impact on the environment.

The common idea of the dependency of life on the environment and the effects of humans and other living organisms on the environment, provides the opportunity for students to apply their knowledge to current environmental problems and what the third grader can do to protect the environment.