

Second Grade

ALL FOUR KITS

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

These second grade expectations increase students' skills for inquiry by asking them to make quantitative measurements and organize data into charts and graphs that will provide students with evidence when communicating scientific ideas. Second graders are given the opportunity to plan and conduct simple investigations with data collection within the physical, life, and Earth science content. The experiences in the classroom inspire a sense of wonder and enthusiasm that leads to the opportunity for students to generate questions based on observations.

Kit: MEASUREMENT OF PROPERTIES

Second grade students expand their understanding of describing matter to include state of matter, texture, hardness, and the measure of length, volume, and weight of different substances. Given the opportunity to observe, measure, and describe common objects, student descriptions become more detailed and astute. Young learners realize that they can add to their descriptions of objects when given the measuring tools necessary to record data and provide evidence of their thinking.

Second grade students are introduced to the concept of classifying objects as a single substance and a mixture of one or more substances. The intent of the content expectation is to introduce the young learner to the concept that not all objects are made of one substance, and may be a mixture of two or more substances.

Kit: PLANT LIFE

Second grade students build on their prior knowledge of the needs of animals and the life cycle of animals from their first grade experiences and apply it to plants. The second grade life science curriculum concentrates on the needs of plants, life cycle of flowering plants (seed, plant, flower, fruit, seed), and characteristics of plants that are passed from parent to young. Young learners gain an understanding of the relationship between all living things through direct experience with organisms in the classroom leading to an understanding of how individual organisms maintain and continue life.

Kit: EARTH'S SURFACE FEATURES

The main concept in Earth science for the second grade student is the description and identification of major landforms and bodies of water found on Earth. As children become more familiar with the Earth and its surface features, they will be able to recognize the slow and rapid changes that occur.

The second grade content expectations provide a common opportunity for students to use their observation skills. Furthering development of these skills from previous grades, students make observations through measurement providing evidence to substantiate their understandings.

Kit: USES AND PROPERTIES OF WATER

Students are particularly focused on water in its three states and the motion of water over land. These content expectations give the students the opportunity to observe rapid changes such as movement of water down a soil covered slope, and gradual changes such as the wind erosion of rock and soil.

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