

## Grade Four

There are four connected mini-units in life and earth science, a unit for physical science, a space unit and one introductory mini-unit in grade four. The mini-unit *Introduction to Grade Four Science* introduces different kinds of scientists, science vocabulary, and the proper use of a hand lens. Earth Science and Life Science are connected in smaller units that allow for teachers to organize them in ways that make sense for their classrooms. In *Soil* students engage in soil studies recognizing that soil is a mixture of decomposed organic and inorganic matter: eroded rocks and minerals. *Rocks and Minerals*, the first geology unit in the K-5 sequence, topics include: layers of the earth, earth forces (erosion and weathering, volcanoes, earthquakes, glaciers), rock formation and the identification of common rocks and minerals. *Discovering Decomposition* unit continues the life cycle units in the K-5 sequence focusing on this last stage in the life cycle and of nutrient cycling. *Living Decomposers; Earthworms* unit highlights the role of living organisms in the decomposition, returning nutrients to the ecological cycle.

The unit *Energy, Light and Sound* should be considered as an introduction to the difficult concepts of energy, light and sound. The FOSS *Sun, Moon and Stars* consists of three sequential investigations, each designed to introduce students to objects we see in the sky. Through outdoor observations made during the day and at night, active simulations, readings, videos, and discussions, students study the Sun, Moon, and stars to learn that these objects move in regular and predictable patterns that can be observed, recorded, and analyzed.

In the fourth-grade science program, emphasis is placed on the development of thinking skills related to defining a problem, setting up and carrying out investigations and/or humane animal behavior studies. Although students are responsible for their own records, planning and carrying out investigations are done in cooperative groups. In cases where individual student's ideas differ from other members of their group, they record their own thinking with supporting reasoning.

