Connecticut Science

Grade 2

Adopted 2010

Properties of Matter

1. **Materials can be classified as solid, liquid or gas based on their observable properties.** 2.1
    1. Compare and contrast the properties that distinguish solids, liquids and gases.
    2. Classify objects and materials according to their state of matter.
    3. Measure and compare the sizes of different solids.
    4. Measure and compare the volume of a liquid poured into different containers.
    5. Design a fair test to compare the flow rates of different liquids and granular solids.

Science and Technology in Society

4. **Human beings, like all other living things, have special nutritional needs for survival.
 This content standard is an application of the concepts in content standard 2.3 and should be integrated into the same unit.** 2.4
    1. Explain that food is a source of carbohydrates, proteins and fats — nutrients that animals (including humans) convert to energy they use to stay alive and grow.
    2. Classify foods into groups based on their source, and relate common foods to the plant or animal from which they come.
    3. Give examples of ways people can improve soil quality and crop growth (e.g., irrigation, fertilizer, pest control).
    4. Compare and contrast how different cultures meet needs for basic nutrients by consuming various foods.
    5. Evaluate the nutritional value of different foods by analyzing package labels.

Structure and Function

2. **Plants change their forms as part of their life cycles.** 2.2
    1. Use senses and simple tools to observe and describe the roots, stems, leaves, flowers and seeds of various plants (including trees, vegetables and grass.)
    2. Use magnifiers to observe and diagram the parts of a flower.
    3. Describe the functions of roots, stems, leaves, flowers and seeds in completing a plant's life cycle.
    4. Record observations and make conclusions about the sequence of stages in a flowering plant's life cycle.
    5. Compare and contrast how seeds of different plants are adapted for dispersal by water, wind or animals.
    6. Conduct a fair test to explore factors that affect seed germination and plant growth.

The Changing Earth

3. **Earth materials have varied physical properties, which make them useful in different ways.** 2.3
    1. Use senses and simple tools (e.g., sieves and beakers) to separate soil into components such as rock fragments, water, air and plant remains.
    2. Classify soils by properties such as color, particle size (sand, silt or clay), or amount of organic material (loam).
    3. Explain the importance of soil to plants, animals and people.
    4. Evaluate the quality of different soils in terms of observable presence of air, water, living things and plant remains.
    5. Conduct fair tests to investigate how different soil types affect plant growth, and write conclusions supported by evidence.