

Science Content Standards Supported by

Elkus Ranch Environmental Education Programs

Grade Two

Life Sciences

2. Plants and animals have predictable life cycles. As a basis for understanding this concept:
 - a. *Students know* that organisms reproduce offspring of their own kind and that the offspring resemble their parents and one another.
 - b. *Students know* the sequential stages of life cycles are different for different animals, such as butterflies, frogs, and mice.
 - c. *Students know* many characteristics of an organism are inherited from the parents. Some characteristics are caused or influenced by the environment.
 - d. *Students know* there is variation among individuals of one kind within a population.
 - e. *Students know* light, gravity, touch, or environmental stress can affect the germination, growth, and development of plants.
 - f. *Students know* flowers and fruits are associated with reproduction in plants.

Earth Sciences

3. Earth is made of materials that have distinct properties and provide resources for human activities. As a basis for understanding this concept:
 - b. *Students know* smaller rocks come from the breakage and weathering of larger rocks.
 - c. *Students know* that soil is made partly from weathered rock and partly from organic materials and that soils differ in their color, texture, capacity to retain water, and ability to support the growth of many kinds of plants.
 - d. *Students know* that fossils provide evidence about the plants and animals that lived long ago and that scientists learn about the past history of Earth by studying fossils.
 - e. *Students know* rock, water, plants, and soil provide many resources, including food, fuel, and building materials, that humans use.

Investigation and Experimentation

4. Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will:
 - a. Make predictions based on observed patterns and not random guessing.
 - b. Measure length, weight, temperature, and liquid volume with appropriate tools and express those measurements in standard metric system units.