

The **Splash Science Mobile Lab** curriculum addresses the following California Science Content Standards:

Grade 4

Life Sciences

- 2. All organisms need energy and matter to live and grow.**
 - b. Producers and consumers (herbivores, carnivores, omnivores, and decomposers) are related in food chains and food webs, and may compete with each other for resources in an ecosystem.
- 3. Living organisms depend on one another and on their environment for survival.**
 - b. For any particular environment, some kinds of plants and animals survive well, some survive less well, and some cannot survive at all.

Earth Sciences

- 5. Waves, wind, water, and ice shape and reshape the Earth's land surface.**
 - a. Some changes in the Earth are due to slow processes, such as erosion, and some changes are due to rapid processes, such as landslides, volcanic eruptions, and earthquakes.
 - b. Moving water erodes landforms, reshaping the land by taking it away from some places and depositing it as pebbles, sand, silt, and mud in other places (weathering, transport, and deposition).

Investigation and Experimentation

- 6. Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and to address the content in the other three strands, students should develop their own questions and perform investigations Students will:**
 - d. Conduct multiple trials to test a prediction and draw conclusions about the relationships between results and predictions.
 - f. Follow a set of written instructions for a scientific investigation.

Grade 5

Earth Sciences

- 3. Water on Earth moves between the oceans and land through the processes of evaporation and condensation.**
 - d. The amount of fresh water, located in rivers, lakes, underground sources, and glaciers, is limited, and its availability can be extended through recycling and decreased use.
 - e. The origin of water used by their local communities.

Investigation and Experimentation

- e. Identify a single independent variable in a scientific investigation and explain what will be learned by collecting data on this variable.**

- h. Draw conclusions based on scientific evidence and indicate whether further information is needed to support a specific conclusion.
- i. Write a report of an investigation that includes tests conducted, data collected or evidence examined, and conclusions drawn.

Grade 6

Shaping the Earth's Surface

- 2. **Topography is reshaped by weathering of rock and soil and by the transportation and deposition of sediment. As a basis for understanding this concept, students know:**
 - a. Water running downhill is the dominant process in shaping the landscape including California's landscape.
 - d. Earthquakes, volcanic eruptions, landslides, and floods change human and wildlife habitats.

Energy in the Earth System

- 4. **Many phenomena on the Earth's surface are affected by the transfer of energy through radiation and convection currents. As a basis for understanding this concept, students know:**
 - e. Differences in pressure, heat, air movement, and humidity result in changes of weather.

Ecology (Life Science)

- 5. **Organisms in ecosystems exchange energy and nutrients among themselves and with the environment. As a basis for understanding this concept, students know:**
 - c. Populations of organisms can be categorized by the functions they serve in an ecosystem.
 - e. The number and types of organisms an ecosystem can support depends on the resources available and abiotic factors, such as quantity of light and water, range of temperatures, and soil composition.

Investigation and Experimentation

- b. Select and use appropriate tools and technology)(including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data.
- d. Communicate the steps and results from an investigation in written reports and verbal presentations.
- g. Interpret events by sequence and time from natural phenomena (e.g., relative stages of rocks and intrusions.)
- h. Identify changes in natural phenomena over time without manipulating the phenomena (e.g., a tree limb, a grove of trees, a stream, a hill slope).