

## LINKS TO CALIFORNIA SCIENCE STANDARDS

### Grade Six

#### **Plate Tectonics and Earth's Structure**

- 1a. Students know evidence of plate tectonics is derived from the fit of continents; the location of earthquakes, volcanoes, and midocean ridges; and the distribution of fossils, rock types, and ancient climatic zones.
- 1d. Students know that earthquakes are sudden motions along breaks in the crust called faults and that volcanoes and fissures are locations where magma reaches the surface.
- 1e. Students know major geologic events, such as earthquakes, volcanic eruptions, and mountain building result from plate motion.
- 1f. Students know how to explain major features of California geology (including mountains, faults, volcanoes) in terms of plate tectonics.

#### **Shaping Earth's Surface**

- 2a. Students know that water running downhill is the dominant process in the shaping of the landscape, including California's landscape.
- 2b. Students know rivers and streams are dynamic systems that erode, transport sediment, change course and flood their banks in natural and recurring patterns.
- 2c. Students know beaches are dynamic systems in which the sand is supplied by rivers and moved along the coast by the action of waves.

#### **Heat (Thermal Energy) (Physical Sciences)**

- 3a. Students know energy can be carried from one place to another by heat flow or by waves, including water, light and sound waves, or by moving objects.

#### **Ecology (Life Sciences)**

- 5a. Students know energy entering ecosystems as sunlight is transferred by producers into chemical energy through photosynthesis, and then from organism to organism through food webs.
- 5b. Students know matter is transferred over time from one organism to the others in the food web and between organisms and the physical environment.
- 5c. Students know populations of organisms can be categorized by the functions they serve in an ecosystem.
- 5e. Students know the number and types of organisms an ecosystem can support depends on the resources available and on abiotic factors, such as quantities of light and water, a range of temperatures and soil composition.

#### **Investigation & Experimentation**

- 7.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.
- 7d. Communicate the steps and results from an investigation in written reports and oral presentations.
- 7e. Recognize whether evidence is consistent with a proposed explanation.
- 7g. Interpret events by sequence and time from natural phenomena (e.g., the relative ages of rocks and intrusions).
- 7h. 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).

