LINKS TO CALIFORNIA SCIENCE STANDARDS

Grade Four

Life Sciences

2.a. Students know plants are the primary source of matter and energy entering most food chains.
2.b. Students know 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.
2.c. Students know decomposers, including many fungi, insects, and microorganisms, recycle matter from
dead plants and animals.
3.a. Students know ecosystems can be characterized by their living and nonliving components.
3.b. Students know that in any particular environment, some kinds of plants and animals survive well, some survive less well, and some cannot survive at all.
3.d. Most microorganisms do not cause disease and many are beneficial.

Investigation and Experimentation

6.a. Differentiate observation from inference (interpretation) and know scientists' explanations come partly from what they observe and partly from how they interpret their observations.
6.c. Formulate and justify predictions based on cause-and-effect relationships.
6.f. Construct and interpret graphs from measurements.

Grade Five

Physical Sciences

1.a. During chemical reactions the atoms in the reactants rearrange to form products with different properties.

Life Sciences

2.a. Students know many multi-cellular organisms have specialized structures to support the transport of materials.
2.c Students know the sequential steps of digestion and the roles of teeth and the mouth, esophagus, stomach, small intestine, large intestine, and colon in the function of the digestive system.

Investigation and Experimentation

6.a. Classify objects (e.g., rocks, plants, leaves) in accordance with appropriate criteria.
6.f. Select appropriate tools (e.g., thermometers, meter sticks, balances, and graduated cylinders) and make inferences based on those data.
6.g. Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data.

Grade Six

Ecology (Life Science)

5.a. 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.
5.b. Students know matter is transferred over time from one organism to others in the food web and between organisms and the physical environment.
5.c. Students know populations of organisms can be categorized by the functions they serve in an ecosystem.
5.d. Students know different kinds of organisms may play similar ecological roles in similar biomes.
5.e. 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 and Experimentation
7.a. Develop a hypothesis
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.