

LINKS TO CALIFORNIA SCIENCE STANDARDS

Kindergarten

Life Sciences

- 2.a. Students know how to observe and describe similarities and differences in the appearance and behavior of plants and animals (e.g., seed-bearing plants, birds, fish, insects).
- 2.b. Students know stories sometimes give plants and animals attributes they do not really have.
- 2.c. Students know how to identify major structures of common plants and animals (e.g., stems, leaves, roots, arms, wings, legs).

First Grade

Life Sciences

- 2.a. Students know different plants and animals inhabit different kinds of environments and have external features that help them thrive in different kinds of places.
- 2.c. Students know animals eat plants or other animals for food and may also use plants or even other animals for shelter and nesting.
- 2.d. Students know how to infer what animals eat from the shapes of their teeth (e.g., sharp teeth: eats meat; flat teeth: eats plants).

Second Grade

Life Sciences

- 2.c. Students know many characteristics of an organism are inherited from the parents. Some characteristics are caused or influenced by the environment.

Third Grade

Life Sciences

- 3.a. Students know plants and animals have structures that serve different functions in growth, survival, and reproduction.
- 3.d. Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations.

Investigation and Experimentation

- 5.e. Collect data in an investigation and analyze those data to develop a logical conclusion.

Fourth Grade

Life Sciences

- 3.a. Students know ecosystems can be characterized by their living and nonliving components.

Fifth Grade

Life Sciences

- 2.a. Students know many multicellular 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.
- 2.d. Students know the role of the kidney in removing cellular waste from blood and converting it into urine, which is stored in the bladder.

Earth Sciences

- 3.d. Students know that the amount of fresh water located in rivers, lakes, under-ground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water.
- 3.e. Students know the origin of the water used by their local communities.

Investigation and Experimentation

- 6.a. Classify objects (e.g., rocks, plants, leaves) in accordance with appropriate criteria.

Sixth Grade**Ecology (Life Sciences)**

- 5.c. Students know populations of organisms can be categorized by the functions they serve in an ecosystem.
- 5.b. Matter is transferred over time from one organism to others in the food web and between organisms and the physical environment.

Seventh Grade**Evolution**

- 3.a. Students know both genetic variation and environmental factors are causes of evolution and diversity of organisms.
- 3. e. That extinction of a species occurs when the environment changes and the adaptive characteristics of a species are insufficient for its survival.

Structure and Function in Living Systems

- 5.a. Students know plants and animals have levels of organization for structure and function, including cells, tissues, organs, organ systems, and the whole organism.
- 5.b. Students know organ systems function because of the contributions of individual organs, tissues, and cells. The failure of any part can affect the entire system.
- 5.g. Students know how to relate the structures of the eye and ear to their functions.

