

**LINKS TO CALIFORNIA CONTENT STANDARDS  
ADVANCED LIVING SYSTEMS LAB AND/OR CRUISE**

**Grade Seven**

Life Sciences

- 2.a. Students know the differences between the life cycles and reproduction methods of sexual and asexual organisms.
- 3.d. Students know how to construct a simple branching diagram to classify living groups or organism by shared derived characteristics and how to expand the diagrams to include fossil organisms.
- 5.a. Students know plants and animals have levels or 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.
- 7.c. Communicate the logical connection among hypotheses, science concepts, tests conducted, data collected, and conclusions drawn from scientific evidence.

**Grade Nine through Twelve**

Ecology

- 6.a. Students know biodiversity is the sum total of different kinds or organism and is affected by alterations of habitats.
- 6.b. Students know how to analyze changes in an ecosystem resulting from changes in climate, human activity, introduction of nonnative species, or changes in populations size.
- 6.c. Students know how fluctuations in population size in an ecosystem are determined by the relative rates of birth, immigration, emigration, and death.
- 6.d. Students know how water, carbon, and nitrogen cycles between abiotic resources and organic matter in the ecosystem and how oxygen cycles through photosynthesis and respiration.

