



3rd Grade

Habitats, Adaptations, Natural Selection, Life Cycles

3rd Grade Life Science Standards

- Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles.

Being part of a group helps animals obtain food, defend themselves, and cope with changes. Groups may serve different functions and vary dramatically in size

- When the environment changes in ways that affect a place's physical characteristics, temperature, or availability of resources, some organisms survive and reproduce, others move to new locations, yet others move into the transformed environment, and some die.
- Sometimes the differences in characteristics between individuals of the same species provide advantages in surviving, finding mates, and reproducing.
- For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all.
- Populations live in a variety of habitats, and change in those habitats affects the organisms living there.

Staging Area Lesson (35 minutes, all students)

A. Puppet show: "Life in a Field" 5 Minutes

Concept: Habitats

B. Grassland and Wetlands Ecosystems Lesson 10 minutes

- Students will work with our docents to place animals in their correct habitats on our visual model of the nature center. They will also discuss the adaptations that the animals have to help them survive in their habitats.

Snake Wrangler Lesson (10 min.)

Our enthusiastic, Aussie wranglers will show the students furs, skulls, skeletons, birds and big live snakes to illustrate many adaptations of physical and behavioral adaptations.

Trail Hike

Small groups of 8-12 students will head out with a nature docent to explore a few habitats in the preserve.

Vernal Pool Trail Excursion (10 minutes, small group)

- Students will learn that these man made vernal pools were created because people have destroyed the natural vernal pools.
- Students will see a threatened species, fairy shrimp that lives in the pools.
- Students will observe many vernal pool creatures and discuss their adaptations for living in these unique seasonal pools.

Marsh/Wetlands Trail Excursion (20 minutes, small group)

- Students will see how a beaver has changed this wetlands environment both for the good and bad for other creatures that live there.
- Students will observe marsh creatures like herons, ducks, beavers, egrets, dragonflies, cattails, red-winged blackbirds and others and discuss their adaptations for this environment.

Oak Woodland Trail Excursion (15 minutes, only available during our extended shows on Wed. and Thurs.)

- Students will walk along a creek under the shade tree canopy which provides a different habitat for the plants and animals
- They will see nesting birds (red tailed hawks, vultures), woodpeckers, songbirds, squirrels, skunk dens and of course old heritage oaks.

Picnic Area

The lesson concludes at the covered picnic area where classes are welcome to stay and eat sack lunches or return to school. You may also want to visit the Roseville Utility Exploration Center at Mahany Park next door. The center has free interactive displays to teach students about energy and environmental issues.

***“In the end we will conserve only what we love;
we will love only what we understand;
and we will understand only what we are taught”***

Baba Dioum