

Animal Study Activity

Lesson Summary:

Students will research an animal they could see while at Mission Springs Outdoor Education. The goal of this activity is to introduce students to some of the animals they may see at Mission Springs and learn about their basic needs.

Background for Teachers:

All animals need food, water, shelter, and space (which includes oxygen, sun, etc.) to survive. These components make up an animal's habitat. All animals have slightly different needs and will often fulfill a different niche (job) in the ecosystem (community). A food chain is a simple diagram that shows how energy flows through an ecosystem. A food web combines these chains together forming a more intricate diagram of energy flow. All food chains or webs start with energy from the sun. The sun's energy is captured by green plants and turned into food. We call these green plants producers and they are the base of any food chain or web. Consumers make up the middle of the food chain/web in many different layers (primary consumer, secondary consumer, etc). Herbivores (eat plants) are primary consumers. Carnivores (eat animals) fall into a couple of groups; carnivores that eat herbivores are called secondary consumers, while carnivores that eat other carnivores are called tertiary consumers. Omnivores are those animals that eat both plants and animals. Decomposers are an important part of the food chain/web as they breakdown dead producers and consumers returning nutrients to the soil for producers to use.

Materials

Each student will need:

- Animal Study Worksheet
- Mission Springs Plant & Animal List
- Books or computers to research their animals with

Procedure:

1. Review food webs with your students and discuss what animals need to survive.
 - a. All animals need food, water, shelter, and space (which includes oxygen, sun, etc.) to survive.
 - b. A food chain is a simple diagram that shows how energy flows through an ecosystem. A food web combines these chains together forming a more intricate diagram of energy flow.
2. Distribute the Mission Springs Plant & Animal List and discuss some of the things you might see while at Mission Springs Outdoor Education.
 - a. Ask each student to select an animal that they would like to learn more about. You could choose to have students work in partners for this or assign animals so that each student is doing a different one.
 - b. Students will be researching their animal and answering the questions on the Animal Study Worksheet.
3. Distribute Animal Study Worksheet.
 - a. Ask students to complete the worksheet and be prepared to discuss it.
4. Have students introduce their animal to the group.

Extension:

When you return from Mission Springs, have students research an animal that they might find near their home. Are there any that they could find at Mission Springs as well?

Animal Study Worksheet

Name of the animal you are researching: _____

1. What does your animal need in its environment to survive?
2. Where does your animal usually live? (e.g. on the ground, in the ground, in the water)
3. What shelter or cover does your animal require?
4. Is your animal a (circle one): Carnivore Omnivore Herbivore
5. What might your animal eat?
6. What might eat your animal?
7. What other animals might you find where your animal lives?
8. What plants are found where your animal lives?
9. How are these plants important to your animal?
10. Using the information you have just learned, draw a food web (on the back of this sheet) consisting of at least 5 organisms (living things) including your animal. Then add in the essential non-living things these organisms need to survive.

Mission Springs Plant and Animal List

This list provides a sampling of what you might see during your trip to Mission Springs Outdoor Education. What you see will depend on the season, location, weather and your keen observational skills.

Common Trees

Coast Redwood
Tan Oak
Coast Live Oak
Douglas Fir
Madrone
California Bay Laurel
Big Leaf Maple
California Buckeye

Common Birds

Steller's Jay
Scrub Jay
Band-tailed Pigeon
Red-tailed Hawk
Red-shouldered Hawk
California Quail
Dark-eyed Junco
California Towhee
American Robin
Chestnut-backed Chickadee
Spotted Towhee
Acorn Woodpecker
Wild Turkey

Mammals

Gray Squirrel
Mule Deer
Raccoon
Striped Skunk
Bush Rabbit

Reptiles & Amphibians

Alligator Lizard
Western Fence Lizard
Gopher Snake
Garter Snake
California Newt
Ensatina Salamander
Pacific Giant Salamander

Other Plants

Poison Oak
California Hazel
Coyote Brush
Sticky Monkey Flower
Wild Lilac
Redwood Sorrel
Sword Fern
Brachen Fern
Chamise
Black Sage
Manzanita
French Broom (Non-native)

Fungi

Carbon Balls
Witches Butter
Turkey Tail
Orange Peel