Favorite Animal Investigation – Post Visit

Level
4th Grade

Abstract
Students will demonstrate their understanding of the information learned during their visit to the Santa Monica Pier Aquarium by combining it with their Favorite Animal Investigation – Pre-visit research.
NOTE: It will be difficult, if not impossible, for students to complete this activity if they have not already done the Favorite Animal Investigation – Pre Visit activity

Objectives
Students will be able to:
- ✓ Categorize animals as carnivores, omnivores, herbivores, scavengers or decomposers
- ✓ Define carnivore, omnivore, herbivore, scavenger, and decomposer
- ✓ Define consumer and producer
- ✓ Categorize consumers are primary, secondary or tertiary
- ✓ Describe how an animal is interconnected to other animals through food chains or food webs
- ✓ Describe how animals interact with their habitats

Targeted Standard
California Science Standard, Grade 4
Life Sciences 2 *All organisms need energy and matter to live and grow. As a basis for understanding this concept:*
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.*
Life Sciences 3 *Living organisms depend on one another and on their environment for survival, as a basis for understanding this concept:*
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.*

Environmental Principles and Concepts (EEI) corresponding learning objectives:
- Recognize that plants and animals, including humans, can be classified by the sources of energy and matter (food) they consume. (2b)
- Classify organisms from a terrestrial, freshwater, coastal, or marine ecosystem as producers and consumers and explain their roles in that system. (2b)
- Describe factors that can adversely affect the health of an ecosystem (e.g., loss of organisms, disruption of food webs.) (2b)
- Recognize that living things meet their need by using resources (goods and ecosystems services) from the environment around them. (***3b***)
- Recognize that changes to the environment caused by humans and other animals influence the survival of some kinds of plants and animals. (***3b***)
- Identify that some changes to the environment caused by humans and other animals affect the cycles and processes that occur naturally in ecosystems and in turn affect the survival of some kinds of plants and animals. (***3b***)
- Provide examples of how human practices have altered the cycles and process that occur naturally in terrestrial, freshwater, coastal and marine ecosystems. (***3b***)

Materials
- Post-Visit Animal Questionnaire – one per student
- Crayons, markers, or other drawing tools

Implementation Overview
Time Allotment: 45 Minutes
Briefly review the concepts of producers and consumers, as well as carnivores, omnivores, herbivores, scavengers, and decomposers with your students. After this review, have students complete the Post-Visit Animal Questionnaire. By reviewing your students' answers, you will be able to evaluate their

understanding of the concepts as well as how their animal fits into its world. Based on students' demonstrated comprehension, it will become clear what concepts need to be re-addressed in the classroom and which have been understood to mastery.

Lesson Extensions *(optional)*

*Have all students in one class try and connect all the food chains and webs they have created to give them a better understanding of how all organisms on Earth are connected to one another.

*Have students present their animal research to the class.

*Food web/food chain creation could be extended beyond the worksheet by having students create a representation of their animal's world in a medium of their choosing: they can paint, collage, use 3-D models, or use computer programs, etc. to create their animal's world. To introduce students to 4th Grade Life Sciences Standard 3, have students label the non-living and living components of their animal's habitat.

*Have students present their information to the class in the form of a game. My animal lives here, eats this, and is eaten by these animals – what kind of an animal do I have? Following this up graphically, students can create a poster of "Who am I?" with clues about their animal on it, and a flap of paper they can lift up to find out the answer.

*Using the information they located for their "Favorite Animal Investigation Organizer," have students write thank you letters to groups working to protect their animal or action letters asking those groups that are harming their animal to stop the damaging action.