

Ecosystem Connections

5.3.2 Pre and Post Field Trip Activity

Activity Information

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Recommended Audience: 5th grade students

Activity Duration: Two 45-60 minute sessions

Activity Location: In a classroom.

Activity Description: Students will explore their own school yard to find out what lives there and figure out what the animals that live in the school yard eat through observations and a small scale research project. Students will then use their knowledge of energy flow through ecosystems to explain how animals they saw during their field trip get their energy and how they fit into their ecosystem.

Theme: The different parts of a habitat are all connected

Path to Championship: This programs aims to help students increase their environmental literacy. Children this age are likely at the beginning of their journey to being a champion for wildlife. This activity does directly tie into Utah's Hogle Zoo's goal of reaching 300,000 students.

Learning Objectives: By the end of this lesson students will be understanding how animals obtain energy from their food and how all parts of their habitat are connected in an ecosystem.

Evaluation:

Students will be able to use their observation and research skills to fill out the provided worksheet and communicate the information and connections they find and how it relates to energy flowing through their school yard habitat.

Students will be able to communicate the knowledge they have gained on energy flow and ecosystems through completing a written assignment and creating an ecosystem with other members of their class.

Activity Preparation

Supplies List:

- General Supplies
 - Pictures of habitats
 - Magnifying glasses
 - Binoculars
 - Worksheet
 - Whiteboard and markers
 - Pencils
 - Sticky notes
 - Internet access

Activity Procedure

1. Give students the provided hand out.
2. Explain to students that they will be going outside to discover the animals that live at the school yard and will be learning about the animals they find to discover what they eat and what other parts of their habitat they interact with.
3. Provide students with pencils and clipboards and go outside. Give the students a set amount of time to make observations and fill out their paper. Encourage them to get low to look in the grass to look for small animals.
4. Give students time to fill out their worksheet in the classroom. Allow for access to websites or field guides that would help them answer the questions on their worksheet.
5. On the whiteboard draw the axis for a bar graph with the labels- eats plants, eats meat and eats both.
6. Give each student three sticky notes, one for each animal, and have them use their sticky notes to create a graph according to the animals they observed and learned about.
7. As a class, discuss the following questions:

- a. Did anyone find animals that fit all three bars on the graph?
 - b. Do more animals find food from plants, animals or both?
 - c. Why do animals eat food?
 - d. Where do plants get their energy from?
 - e. If plants get their energy from the sun and some animals get their energy from plants and some get it from animals who eat plants, can someone draw how energy might flow in the school yard habitat? (Example- Sun> grass> grasshopper>bird).
8. Before going on the field trip or while on the bus, task students with finding one animal at the zoo they would like to learn more about and encourage them to read the signs at the zoo to learn more about that animal.
 9. Give students the provided worksheet and have them fill it out. If necessary, allow students access to books or the internet to answer all of the questions about their chosen animal. Alternatively, this can be done while at the zoo where most of this information should be available or staff can help answer.
 10. Once students have completed their worksheet have all of the students stand up and talk to each other to find other animals that would live in the same ecosystem as theirs.
 11. In their groups, have students discuss how the flow of energy would work in their animal's habitat. Which of the chosen animals gets energy from the plants? Which gets it from the animals they eat the plants?
 12. Have each group present their habitat, the animals they learned about and how they have decided energy flow would work starting with the sun and ending with their selected animals. (For example: On the African Savanna the sun gives energy to the trees and grass, the giraffes eat the trees, the zebra eat the grass and the lions eat both.)

RESEARCH CHART

Name: _____

As you go outside to see what animals live around your school, draw and write down your observations about three animals you see. You will later be researching more about the types of animals that you see. As you do this activity, think about how this animal gets energy, who it might be food for and how it interacts with its habitat.

Drawing of animal	Where I found it	What it eats	What I observed or learned

MY ZOO RESEARCH

Name: _____

Animal I studied: _____

Pick an animal you saw on your visit to Utah's Hogle Zoo. Remember what was on the sign or research more about the animal, its habitat and how energy flows in this animals ecosystem. You will be talking to other students about what you learned!

Drawing of animal	Where does this animal live?	What does this animal eat?	What eats this animal?
	Why does this animal eat?	Where does this animal's food get energy to grow?	What other animals lives in the same habitat?