



FINDING THE PARTS OF AN ECOSYSTEM LESSON PLAN

Proposed Time: 2 hours

Grade Level: 3rd- 5th grade

Student Performance Objectives:

1. Students will be able to define the terms associated with ecosystems: desert, grassland, lava field, alpine desert, rain forests, coral reef, and open forest.
2. Students will be able to define the terms for the elements that make up these ecosystems: cattle, butterfly fish, lichens, ferns, observatories, nene goose, and feral pig.
3. Students will be able to locate Mauna Kea on a map of Hawaii and color in only the island on which it can be found.

National Geography Curriculum Standards Addressed:

Standard 8: "The characteristics and spatial distribution of ecosystems on Earth's surface"

Materials:

Handouts of information on Mauna Kea
Blank maps of Hawaii
Crayons or colored pencils
Any additional information needed
Internet access for further research.

Anticipatory Set:

The instructor will open the lesson by distributing a blank map of Hawaii to each child. Once every student has a map, the instructor goes on to discuss Hawaii. The students will be encouraged to compile a list of facts that is already known about Hawaii (the instructor may list the facts on the board). Some responses may include references to: the beach, the heat, surfing, volcanoes, pineapples, and flowers. Students may be reminded that Hawaii is a chain of islands and explain the lesson will focus on Mauna Kea, the largest Hawaiian island. The students may then be asked to locate and color the large island on their map.



Steps of the lesson:

1. The instructor will explain to the class that small areas may have several ecosystems, such as Mauna Kea. These small areas are called habitats.
2. In groups of 2-3 students, students will look over the handouts on Mauna Kea.
3. Students will be asked to identify and define the ecosystems that are found on the island. They will also be asked to identify the elements that make up the ecosystem.
4. The students should be asked to look out for the following terms:
 - ✓ Cattle
 - ✓ Butterfly fish
 - ✓ Lichens
 - ✓ Ferns
 - ✓ Observatories
 - ✓ Nene Goose
 - ✓ Feral Pig
5. Once completed, the class will go over the information as a group and discuss the different types of elements that make up the ecosystem as well as identify the different types of habitats that make up the island.

Evaluation Strategy: Each student will create a postcard, and pretend they have visited the habitat of their choice. They will explain what they saw, what the climate was like, and how it was different from their own habitat.



Closure:

At the end of the lesson, the students will be asked what would happen to the ecosystem if one of the elements were removed. For example, if there were no cattle, what would happen to the grassland? Does the grassland need the cattle or do the cattle need the grass? Ask the students if any of the animals they have learned about remind them of the animals they know that live in different ecosystems.

Plan for independent practice

- Students may draw pictures or find pictures in magazines of different types of ecosystems from around the world.

Extensions for gifted students

- Students may chose different ecosystems from around the world and make a list of the similarities and differences. They may also want to identify the threats to these habitats.

Adaptations for special needs students:

- ELL : a bilingual instructor may be needed to translate the requirements and expectation.
- Hearing Impaired: Special seating may be required as well as hearing devices.
- Intellectually Disabled: Teacher aide will be available to assist with instructions and requirements.