Habitat Detectives

Overview

Students will learn about four different habitats in Oregon, how to identify them, and what animals can be found in those habitats. This lesson can be used after your visit to the Museum of Natural and Cultural History.

Objectives

Students will:

- Learn what a habitat is
- Develop investigative skills and senses
- Investigate habitats and understand which animals live in their school yard habitat

Vocabulary

- **Habitat:** the natural home or environment of an animal, plant, or other organism
- **Investigate:** to try to find out the facts about something or get the information about something
- **Detective:** a person whose job is to find information about something or someone
- Evidence: something which shows that something else exists or is true

Background Information

Plants and animals live in diverse ecosystems and habitats. A habitat is the natural home or environment of an animal, plant, or other organism. There are many different types of habitats throughout our world, and even throughout the state of Oregon. They can be dry, wet, or both. They can contain trees, grass, sand, and/or water. These habitats can be marine, forest, grassland, mountain, and desert.

Schoolyards can host diverse plants and animals, just like the deserts, valleys, and coastal lands found in Oregon. The plants and animals in these habitats are looking for food, water, space, and shelter. In addition, all living things need energy from the sun, whether they are exposed to an abundance of sunlight or very little.

By using investigative skills like observing, questioning, hypothesizing, and testing, as well as their five senses, students can discover what kinds of animals and plants are living in different habitats. Looking for things like animal tracks,

Subject





Grade

 $K-2^{nd}$

Time

30-45 minutes

Materials

- Smart Board, dry erase board, or chalkboard
- Dry erase markers or chalk
- Investigation worksheets (7-10 copies)
- Clipboards
- Pencils
- Boundary materials

Set Up

• Create boundaries for exploration using cones/banners/rope/etc.

Standards (NGSS)

Science

- K-LS1-1: Use observations to describe patterns of what plants and animals (including humans) need to survive.
- 1-LS3-1: Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.
- 2-LS4-1: Make observations of plants and animals to compare the diversity of life in different habitats.

scat, nests or dens, and observing sunlight activity will help them understand what living things exist in these habitats.

Classroom Activity (25-35 min)

Intro: Remind students about their trip to the Museum of Natural and Cultural History. Ask them "what is a track?" (a print left in sand/dirt/mud/snow). Ask students what kinds of animal tracks they might find in Oregon (deer, cougar, wolf, raccoon, bird, etc.). Tell students this can also be called evidence, something that tells us something exists.

Ask students "what is a habitat" (a place, where you live, etc.)? Tell students a habitat is the home or environment of any living thing: animals, plants, or organisms. Tell students a habitat can be dry, wet, grassy, or filled with trees. Ask students to describe what the habitat(s) is/are like in their schoolyard (dry, grassy, etc.).

Have students use their senses to discover evidence. Ask students "what are some senses we can use to find evidence" (sight, smell, hearing). Ask students what is some evidence we might *see* in the schoolyard habitat to tell us what lives there (feathers, scat, tracks, etc.). Ask students what is some evidence we might *hear* (birds singing, squirrels running, etc.). Ask students what is some evidence we might *smell* (flowers, scat, food, etc.).

Tell students they will go outside to investigate the schoolyard habitat. Tell them they will draw symbols on a map to show where they found their evidence. Show the students the different symbols for the map key and what they mean (X = scat, O = track, etc.) Show students the example map.

Activity: Divide students into small groups (2-3 students per group). Tell students they will be detectives looking for evidence of plant and animals in their habitats. Ask students what types of evidence we can look for (tracks, shelters, scat, etc.). Tell students to record their evidence on their investigation worksheets by drawing, circling, or mapping what they find. Remind students not to disturb the habitats by using only their eyes and ears to observe them.

Float between groups to answer any questions or ask leading questions to ensure students are on-topic.

After allowing students to investigate for 10-15 minutes, gather them in a central location to discuss their findings.

Conclusion (5-10 min)

Student groups will compare their findings and maps with other groups to see

what each found. Students will draw conclusions about which animals likely live there, what they eat, and how they find water.

Extension I: Students may use cameras to document the schoolyard plants, animals, and evidence.

Extension II: The teacher will have students create two categories (sunlight/shady; grassy/sandy; wet/dry; etc.) and divide student evidence into each category.

Lesson Adaptations

Kindergarten classes may work together to find evidence in habitats and create a habitat map as a class.

Students with limited mobility may work in one small, designated area with their student group.