

Comparing Life in Different Habitats

By making observations about the plants and animals in one habitat, and comparing them to those found in another, students can begin to grasp the diversity of life and how it differs depending on the environment. This is a great way to begin to introduce the concept of adaptations as well.

GRADES: 2nd – Middle School

INTENDED OUTCOMES: Head, Feet

SUGGESTED SUPPLIES:

- Paper, pens, markers, magnifying glasses

Suggested steps and/or focus for each grade level*:

2nd and 3rd GRADE:

- Select two “habitats” within the context of the school grounds, for example: a grassy playing field, a native plant garden, a part of the playground with lots of trees and one without.
- Go outside with students and ask them, in pairs, to make and record the types and amounts of plants and animals that they see in that habitat. They can do this through drawing, writing, tallying on a worksheet you make, etc. Especially in areas that seem to have less diversity (lawns, parking lots, etc.), encourage them to get down on the ground and look closely!
- Repeat in a different habitat - even the other side of the yard or the parking lot is fine, as long as it has some set of characteristics that set it apart.
- Let students to share how many and what different types of plants and animals (or insects!) they found in the different habitats. You could even make a chart or graph of what and how many of each species was found in each location!
- If you found different plants and animals in each habitat, discuss with students what those differences are. Did you find a certain insect in a sunny area but not in a shady area? Why might that be? (Keep in mind that for plants on the schoolyard they are most often planted there and may not accurately reflect or be adapted to the conditions of the environment.)

4th and 5th GRADE:

- Expand from the schoolyard to the neighborhood and regional environment (4th grade) and to the national context (5th grade). This might mean visiting or researching the plants and animals that can be found in a local park or open space preserve (4th grade) or an entirely different biome (5th grade).

MIDDLE SCHOOL:

- Take a real or virtual field trip to a regional natural area within a different life zone than the school. Record observations about the types of plants and animals found there. You can have students take photos and notes to go with each or create annotated drawings.
- **Compare and contrast** these observations with ones that students make in the life zone local to the school. Discuss how these species are **uniquely adapted** to survive best their habitats.

*For more detail on the grade-level focus for natural and social concepts and sense of place, please refer to the Guidelines



TIPS AND TRICKS

- One way to add scientific rigor to your observations is to use on a *transect*. Cut a piece of string or rope that is long enough to go across the space you are interested in studying. Lie the string on the ground and anchor the ends. Depending on the size of the space, either have students record everything they find along the string, or only at specified intervals along the string (i.e. every foot). You can also use a hula-hoop or other object to frames a set amount of space. When you go to your second habitat, make sure you use the same methods that you did in the first, so that the baseline for comparison is accurate.



Relevant Standards

SS09-GR.2-S.2- GLE1