

Habitats

GRADES 3–5

Guiding Question

What resources do habitats provide that allow organisms to survive and thrive?

Connecting Concepts

- Organisms can survive only in environments in which their particular needs are met. A healthy ecosystem is one in which multiple species of different types are each able to meet their needs in a relatively stable web of life. (NGSS, LS2.A: Interdependent Relationships in Ecosystems [abridged])
- Matter cycles between the air and soil and among plants, animals, and microbes as these organisms live and die. Organisms obtain gases, and water, from the environment, and release waste matter (gas, liquid, or solid) back into the environment. (NGSS, LS2.B: Cycles of Matter and Energy Transfer in Ecosystems)
- Populations live in a variety of habitats, and change in those habitats affects the organisms living there. (NGSS, LS4.D: Biodiversity and Humans)
- Forests provide habitat for fish and wildlife. (PLT FLF, 2.A.1)

Scope and Sequence

The collection and arrangement of content below supports an intentional student learning progression.

| Activity | Description |
|------------------------------|---|
| Discover Diversity | Students imagine that they are visitors from outer space viewing life on Earth for the first time and describe the life forms they find in study plots. |
| Every Tree for Itself | Students engage in an active simulation to learn what resources trees need and how trees compete for resources. |
| Soil Builders | Students compare different types of soil and investigate the role soil organisms play, both in building soil and in decomposition. |
| Fallen Log | Students examine organisms that live in, on, and under rotting logs or other decomposing pieces of wood. |
| Web of Life | Students research plants and animals in a forest ecosystem and model one way they are connected |

See plt.org/academic-standards for detailed standards correlations for each activity.

Storyline

Students explore the concept that organisms get the resources they need from their habitats.

Storyline continued on next page.



Habitats (cont.)

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- Begin with the activity Discover Diversity, in which students observe life forms in different study plots. Introduce the unit topic by asking: What enables an organism to survive better in one habitat than another?
- Then, conduct the activity Every Tree for Itself, in which students model what happens when the resources trees need are limited.
- Follow with the activity Soil Builders, in which students investigate soil and soil organisms. Challenge students to identify how soil organisms both depend on and help build soil, a critical habitat resource for trees and other living things.
- Next, use the activity Fallen Log to introduce some of the organisms that live in, on, and under fallen logs or rotting pieces of wood. Encourage students to explain how these organisms depend on their habitat of dead wood for survival.
- Conclude the unit with Web of Life, in which students research plants and animals in a forest ecosystem and model the forest food web. You might challenge students to design a way to show how the forest habitat supports the organism they researched.

