Unit 5 - Relationships in Habitats

Content Area:	Science
Course(s):	Science 2
Time Period:	May
Length:	20 Days
Status:	Published

Unit Summary

In this unit of study, students develop an understanding of what plants need to grow and how plants depend on animals for seed dispersal and pollination. Students also compare the diversity of life in different habitats. The crosscutting concepts of cause and effect and structure and function are called out as organizing concepts for these disciplinary core ideas. Students demonstrate grade-appropriate proficiency in planning and carrying out investigations and developing and using models. Students are also expected to use these practices to demonstrate understanding of the core ideas.

Student Learning Objectives

Students will learn to ...

- make observations of plants and animals to compare the diversity of life in different habitats.
- plan and conduct an investigation to determine if plants need sunlight and water to grow.
- develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.
- ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

Standards

SCI.K-2.K-2-ETS1-2	Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.
SCI.K-2.K-2-ETS1-3	Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.
SCI.K-2.K-2-ETS1-1	Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.
SCI.2-LS2-1	Plan and conduct an investigation to determine if plants need sunlight and water to grow.
SCI.2-LS2-2	Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.
SCI.2-LS4-1	Make observations of plants and animals to compare the diversity of life in different habitats.

Essential Questions

- How does the diversity of plants and animals compare among different habitats?
- What do plants need to live and grow?

• Why do some plants rely on animals for reproduction?

Enduring Understanding

Students will understand that ...

- where are many different kinds of living things in any area, and they exist in different places on land and in water.
- plants depend on water and light to grow.
- plants depend on animals for pollination or to move their seeds around.
- designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people.
- a situation which people want to change or create can be approached as a problem to be solved through engineering.
- asking questions, making observations, and gathering information are helpful in thinking about problems.
- before beginning to design a solution, it is important to clearly understand the problem.

Resources

- Insects and Plants online resources
- Science Safety and Practices (see related documents below)
- How did a tree travel halfway around the world? Mystery Science
- Do plants eat dirt? Mystery Science
- Why do trees grow so tall? Mystery Science
- Should you water a cactus? Mystery Science
- <u>Where do plants grow best?</u> Mystery Science
- NGSS interactive notebook grade 2 (pages 34 78)
- Brain Pop Jr. Parts of a Plant
- Brain Pop Jr. Plant Life Cycle
- Brain Pop Jr. Plant Adaptations
- Brain Pop Jr. Arctic Habitat
- Brain Pop Jr. Desert Habitat
- Brain Pop Jr. Forest Habitat
- Brain Pop Jr. Freshwater Habitat
- Brain Pop Jr. Ocean Habitat
- Brain Pop Jr. Rainforest Habitat