

Living Organisms and their Environment

Content Area: **Science**
Course(s): **Science 4**
Time Period: **Undefined**
Length: **Undefined**
Status: **Published**

Unit Overview

Essential Questions

How do living things interact with their environments?

What are ecosystems?

How do living things get energy?

What are food chains and food webs?

How do living things affect the environment?

What are fossils?

What can fossils tell us?

Content

An ecosystem is all the living and nonliving things in an environment and the many ways they interact.

Plants get energy mainly from sunlight. Animals get energy from consuming plants and other animals.

A food chain is the transfer of energy from one organism to another by eating and being eaten. A food web is a system of overlapping food chains in which the flow of energy branches out in many directions.

Living things affect the environment by changing the environment.

A fossil is the remains or mark of an animal or plant that lived long ago.

Fossils can tell us what extinct organisms looked like and how they live.

Skills

Describe parts of ecosystems and some examples of ecosystems.

Explain that animals get energy from the plants and animals they eat, and describe the possible consequences of the removal of one component in a balanced ecosystem.

Explain how energy flows in a food chain and food web. Know how some organisms compete for resources.

Describe the effect of a sudden change of one group of organisms on another group.

Explain that fossils are the remains or marks of living things and demonstrate an understanding of the ways a fossil can form.

Describe how scientists use fossils to learn about the past.

Assessments

Apply the understanding of how living things interact with their environments to explain how a beaver's dam affects other living things.

Study Guide

Chapter Review

Chapter Test

Benchmark Practice

Performance-Based Assessment, Program Guide pg 54: Build a Model of an Ecosystem, Write a Biography, and/or Make a Presentation

STEM Activity Book

Lessons/Learning Scenarios

Chapter 4: Lesson 1, Lesson 2, Lesson 3, Lesson 4, Lesson 5, Lesson 6

Inquiry, pg 140-141: How can you estimate how many animals live in an ecosystem?

Vocabulary

Study Guide

Chapter Review

Standards

SCI.3-4.5.1.4.B.3

Formulate explanations from evidence.

SCI.3-4.5.1.4.C.1

Monitor and reflect on one's own knowledge regarding how ideas change over time.

SCI.3-4.5.1.4.D.2

Work collaboratively to pose, refine, and evaluate questions, investigations, models, and theories.

SCI.3-4.5.1.4.D.4

Handle and treat organisms humanely, responsibly, and ethically.

SCI.3-4.5.3.4.A.1	Develop and use evidence-based criteria to determine if an unfamiliar object is living or nonliving.
SCI.3-4.5.3.4.B.1	Identify sources of energy (food) in a variety of settings (farm, zoo, ocean, forest).
SCI.3-4.5.3.4.C.1	Predict the biotic and abiotic characteristics of an unfamiliar organism's habitat.

Resources
