

Organisms Conceptual Storyline

Unifying Concept

An ecosystem integrates the needs of organisms with their environment.

Unit Concept

Organisms have basic needs that are met by their environments.

Grade-Level Concept

Observing plants and animals in natural and model settings helps us understand the interdependence between organisms and their environment.

Subconcept 1

Plants and animals are two kinds of organisms. Organisms are similar in some ways and different in others.

Lesson 1: Pre-Unit Assessment: Sharing What We Know about Organisms
Students discuss what they know about organisms.

Subconcept 2

The new starting point in the life cycle of a plant is a seed.

Lesson 2: Observing and Describing Seeds
Students explore how seeds are similar and different.

Lesson 3: Planting Our Seeds
Students plant seeds and begin to observe their growth.

Lesson 6: How Have Our Seeds Changed?
Students describe how their plants have grown.

Subconcept 3

Terrariums and aquariums may be used as models to examine the interactions between plants and animals in their natural environments.

Lesson 4: Observing Woodland Plants
Students observe two woodland plants in a terrarium.

Lesson 5: Observing Freshwater Plants
Students observe plants in an aquarium.

Lesson 7: Observing Freshwater Snails
Students add snails to their aquariums and observe the interactions between plants and animals.

Lesson 8: Observing Guppies: How Do They Compare with the Snails?
Students identify similarities and differences between two aquatic organisms.

Lesson 9: Observing Pill Bugs
Students explore the needs of a land animal.

Lesson 10: Observing Bess Beetles and Millipedes: How Do They Compare with the Pill Bugs?
Students begin to appreciate the diversity and interdependence of life forms.

Lesson 11: What's Happening in the Aquarium?
Students observe changes in the aquariums and discuss the organisms' needs.

Lesson 12: What's Happening in the Terrarium?
Students observe changes in the terrariums and discuss the organisms' needs.

Subconcept 4

Humans, like other organisms, depend on, and have an impact on, their environment.

Lesson 16: Take a Look at Ourselves
Students apply what they have learned to better understand the needs of and interactions among humans.

Subconcept 5

Animals and plants in nature have evolved to form closely knit, interdependent systems.

Lesson 13: Freshwater and Woodland Plants: How Do They Compare?
Students study the needs and characteristics of different plants.

Lesson 14: Freshwater and Woodland Animals: How Do They Compare?
Students study the needs and characteristics of different animals.

Lesson 15: How Are Our Plants and Animals Alike and Different?
Students summarize what they have discovered about the similarities and differences between different types of organisms.

Lesson 17: Post-Unit Assessment: Sharing What We Know about Organisms
Students discuss and reflect on what they have learned.