

Animal Studies Concept Storyline

Unifying Concept

An organism's behavior and physical structure are part of a system that includes inter-relationships with its environment.

Unit Concept

Animals develop behaviors and structures that help them adapt to their habitats. When the habitat changes, some animals survive; others die or move to new locations.

Grade-Level Concept

A habitat is where an animal finds food, water, shelter, and space—the things it needs to grow and reproduce. Each animal has specific needs.

Subconcept 1

The nature of a habitat controls the kinds of organisms that may survive within it

Lesson 1: Pre-Unit Assessment: Thinking about Animals and their Homes

Students discuss what they know about animals and their habitats.

Lesson 2: Inviting Animals into the Classroom

Students read about the habitats of the dwarf African frog, fiddler crab, and millipede and identify the needs of each organism.

Subconcept 2

The structures and behaviors of an organism determine how it adapts to its environment.

Lesson 3: Living in Water: Dwarf African Frogs

Students create a habitat in the classroom for the dwarf African frog.

Lesson 4: Observing the Frogs More Closely

Students study the frog's body structures and behavior.

Lesson 5: Living Where Land and Water Meet: Fiddler Crabs

Students create a habitat in the classroom for the fiddler crab.

Lesson 6: Observing the Fiddler Crabs More Closely

Students study the fiddler crab's body structures and behaviors.

Lesson 7: Observing the Behavior of Frogs and Crabs

Students share their observations of the frogs and crabs. They complete a self-assessment.

Lesson 8: Living on Land: Millipedes

Students create a habitat in the classroom for the millipede.

Subconcept 3

An organism's structures and behaviors are related to its environment.

Lesson 9: Observing the Millipedes More Closely

Students observe and record data on the millipedes and compare the habitats of the three classroom animals.

Lesson 10: How Do Animals Respond to a Change in Their Habitats?

Students design, perform, and discuss a controlled test to examine how the frog, crab, and millipede adapt to a change in one element of their habitats.

Lesson 11: Observing Humans Closely

Students observe, record, and discuss the needs of humans.

Subconcept 4

A combination of behaviors and structures, rather than any single characteristic, enables an animal to survive in a particular habitat.

Lesson 12: Researching Animal Behavior

Students begin a team investigation that involves exploring one specific behavior of one animal.

Lesson 13: Part 1: What Makes an Animal Special?

Students continue the work begun in Lesson 12. They explore the characteristics that enable humans to survive in a variety of habitats.

Lesson 14: Part 2: What Makes an Animal Special?

Students continue to examine the structures and behaviors of each animal in relation to its habitat.

Lesson 15: There's No Place Like Home

Students compare and contrast the structures and behaviors of frogs, crabs, millipedes, and humans.

Lesson 16: Presenting Our Research

Students share their research results.

Lesson 17: Post-Unit Assessment: Sharing What We Know about Animal Studies

Students reflect on and discuss what they have learned.