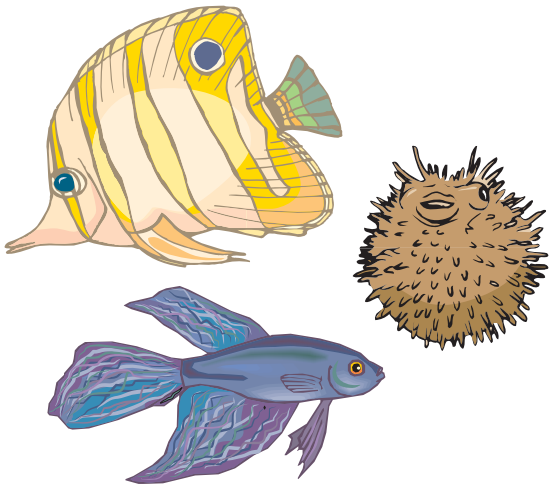
Funky Fish Morphology Activity



Funky Fish Morphology

Lesson Plan
Habitat Cards

Lesson Plan
Funky Fish Morphology

Note: Italicized words are potential script for the teacher.

Objectives

- Students will be able to explain the connection between animal morphology and habitat.

Materials

- Colored clay
- Fish habitat cards (following this lesson plan)
- Examples of fish morphology (preserved fish, photos, illustrations, etc.) and other animals

Introduction (10 minutes)

- While showing examples of salmon morphology, briefly explain why certain morphologies are advantageous given the fish's native habitat and predator-prey relationships. Leading question: What effect might habitat, potential predators, and prey types have on fish morphology?

  Examples: A sea horse's unique shape allows it to live in seagrass or on reefs. A flounder hides from prey by burying itself in the sand. A puffer fish avoids predators by becoming too big to eat.
- Make sure each student understands the relationship between form and function in the animal world.

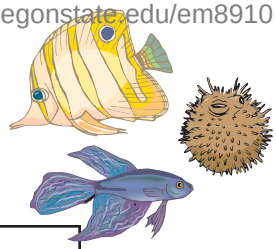
Activity (30 minutes)

- Explain that the goal of this activity is to design the best adapted fish possible.
- Give each student or group a large glob of clay.
- Give one habitat card to each student or group.
- Instruct students to use the clay to shape their fish, giving special attention to mouth morphology. Mouth morphology should be clearly represented in detail.
- Show more examples of animal morphologies. This time include nonaquatic animals as well. Help the class compare and contrast several of their fish designs with other creatures that inhabit similar habitats.

Closing activity/Assessment (10 minutes)

- Ask students or groups to show their models in front of the class, indicating how certain features will benefit and/or inhibit the fish's survival in its habitat.

Habitat Cards



Your fish lives in cold, fresh water. It is a carnivore, but relies on camouflage rather than speed to catch its prey.	Your fish lives in cold, fresh water. It is a carnivore, but relies on camouflage rather than speed to catch its prey.
Your fish must travel long distances from its spawning grounds to its feeding grounds. It prefers to eat meat, but will also eat plants when they are available. Your fish is a very fast swimmer and lives in salt water.	Your fish must travel long distances from its spawning grounds to its feeding grounds. It prefers to eat meat, but will also eat plants when they are available. Your fish is a very fast swimmer and lives in salt water.
Your fish is very large, but eats very tiny animals called krill. Krill are found in large groups in the ocean, numbering in the millions.	Your fish is very large, but eats very tiny animals called krill. Krill are found in large groups in the ocean, numbering in the millions.
Your fish lives in freshwater lakes. It has no natural predators and spends most of its time munching on plants found at the bottom of lakes.	Your fish lives in freshwater lakes. It has no natural predators and spends most of its time munching on plants found at the bottom of lakes.
Your fish is an aggressive carnivore that lives in fresh water. It eats other fish, amphibians, mammals, and even its own kind.	Your fish is an aggressive carnivore that lives in fresh water. It eats other fish, amphibians, mammals, and even its own kind.