



SHAPED TO SURVIVE

Student Learning Outcome

Explore how an animal's body is shaped for survival in its environment. Create an animal that is appropriately shaped for survival

Materials

- Everyday objects of different shapes for animal sculptures:
 - toilet paper rolls, buttons, pipe cleaners, lids of jars, tops of bottles, straws, empty egg cartons, six-pack plastic rings, margarine tubs, cotton balls, old shoelaces, old sponges, milk and orange juice cartons, toothpicks, pencils, aluminum foil, etc.
- The following art materials:
 - glue
 - construction paper
 - corks
 - children's scissors
 - gift boxes
 - frozen juice cans
 - tissue boxes

Teacher Preparation

Gather photographs or illustrations of a giraffe, a penguin, an armadillo, a python, a ferret, and a hippo.

Procedure

1. As a MOTIVATIONAL ACTIVITY, play the "What Animal Am I?" game. Begin by reading the shape descriptions of the animals below and ask the students to figure out which description goes with which animal photograph or illustration. They can respond by either naming the animal or pointing to it. Reiterate how an animal's overall body shape and the shape of its individual body parts often are good indicators of its lifestyle.

"What Animal Am I?" game

Animals come in lots of different shapes. The shape of an animal can help us guess how that animal lives. Here are some animals whose body shapes are important to the way they live. Can you figure out which shape description below goes with each animal? After you read or hear a shape description, point to the animal you think is being described.

Shape Descriptions

- My long legs and neck allow me to feed on the leaves in the treetops.
- My body is long and thin and my legs very short. I can move easily through the narrow, underground tunnels where I live and hunt.
- I am round and smooth, with webbed feet and flipper-like wings to help me swim through the water.

- I have an oval body and short legs with sharp claws to help me dig underground. I have hard bony “armor” covering the top of my body. If I am attacked, I change my shape and curl up in a ball.
 - My long, thick, hose-like body slithers up trees, or hangs from them by my strong tail. I don’t have legs or arms to help me climb.
 - I have a fat, oval body with thick legs and a big head. I can swim with only the top of my head sticking out of the water.
2. Complete the *Animal Sculptures* activity. For this activity assemble the collection of everyday items of different shapes and make them accessible to the students. Divide the class into groups of three or four students. Instruct each group to choose an animal to make as a sculpture.

Give the groups enough time to pick an animal and discuss how its shape is important to the animal’s survival. You may wish to talk with each group about their animal and where it lives. Ask how the shapes of their chosen animal are important to survival. This may guide the students into picking more suitably shaped items with which to make their sculptures. Then have them select items from the collection to make the animal.

After the groups have made the sculptures, instruct them to select a spokesperson to explain why certain objects were used. Ask: *What are the shapes of the objects that make up the animal? What is the overall body shape of the animal? Where does the animal live? How does it find its food?* Focus on the relationship between shape and lifestyle. Ask: *Does the animal have webbed feet, a small head, a tube-like body? How might these shapes help the animal to survive?*

From Pablo Python Looks at Animals (Grades K-3)





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