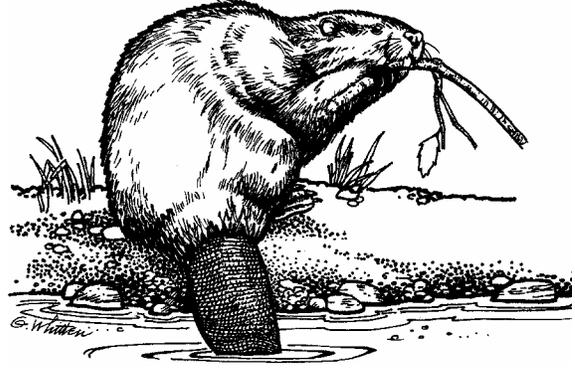


# Dress A Beaver



## **OBJECTIVES**

To understand the concept of adaptation and make the students aware of the adaptations of a beaver.

## **METHOD**

Student will use props to dress up as a beaver, highlighting important adaptations.

## **BACKGROUND**

An adaptation, or to become adapted is the process of making adjustments to the environment. For example, forests develop only where soil types, moisture, and sunlight are balanced to the proper degree. Desert plants have made adjustments so that they are able to live under intense sunlight, on poor quality soils, and with a much reduced water supply. Animals have a variety of adaptations, including webbed feet, long legs, big ears, thick fur, and coloration. These adaptations have evolved so that the animal is better suited to its environment and lifestyle.

The major purpose of this activity is for students to realize that the beaver has adaptations that give it an advantage in its environment to help it survive. The students will recognize ways in which the beaver is physically adapted to its environment.

## **MATERIALS**

The following is a list of props needed for the Dress A Beaver costume, the adaptations each prop represents and their function for the beaver.

- **Small canoe paddle**—represents the beaver's tail which helps the beaver maneuver while swimming, warns other beavers of possible danger by slapping the water surface, stores fat for when food is in low supply, is used as a stool when sitting up to gnaw on trees.
- **Cut out teeth**—the teeth of a beaver are unique. They grow at an enormous rate (as much as three inches a month.) They help the beaver obtain the wood materials that they need to eat (the cambium of trees) and build their lodges and dams.
- **Beaver hide**—(or any other animal hide) the beaver was once an endangered species in North America due to extensive hunting and trapping for the sale of furs. The fur helps keep the beaver warm, its coloration also provides

protective camouflage out of water, it has two types of hair, guard hairs which help with insulation and sensing, and inner hair which provides the bulk of insulation and waterproofing.

- **Oil Can**—represents the oil gland on the beaver; the oil helps to keep it dry even when swimming. It is located near the reproductive organs, at the base of the tail.
- **Swimming fins or flippers**—represents the webbed back feet of the beaver, which enhances its swimming ability.
- **Rubber gloves**—these represent the manipulative front paws. They enable the beaver to groom itself, build their structures, and grip their food. All four paws have small claws for digging and gripping.
- **Ear and nose plugs**—these represent the special muscles in the beaver’s nose and ear canals that enable them to close their nose and ear openings completely allowing no water to enter them when submerged.
- **Swimming goggles**—beavers have a third eyelid or “nictitating membrane” over their eyes to protect their eyes when swimming underwater.
- **Cologne or perfume**—Although beavers do not smell this good, they possess a scent or “musk” gland which they use to mark their territories.

### ***PROCEDURE***

Ask for a volunteer from the group and tell them that, with the group’s help, you are going to turn the volunteer student into a beaver by dressing the volunteer with props representing all the adaptations that a beaver possesses. Then ask for volunteers who can tell you an adaptation that a beaver has that enables it to survive in its aquatic environment. As the students come up with the different adaptations, add the props, one at a time, to the volunteer student. Make sure to take time to explain the uses of each adaptation to the group and how it helps the beaver survive. The props can be put on the volunteer in any order and leading questions can be asked to help the group come up with all of the adaptations.

### ***ASSESSMENT***

Pick an animal that is the predator of the beaver, such as a coyote, wolf, mountain lion, alligator, human, etc. Design a picture, mural, or diorama to illustrate the habitat of the beaver, its predator, and identify what adaptations each animal uses to survive. Draw a picture of the food chain that includes the beaver, its food, and its predator.

