

**CHAPTER 8****HANDOUT**

# Adaptations in the Beaver

## Answers

**BLM 8-2A**

Read through the following information about the beaver. In the column on the right, write down how you think the characteristic in the left column would help the beaver survive.

### The Beaver – *Castor Canadensis*

Characteristic	Advantage
The beaver is compact and rotund, which makes it slow on land, but it is a graceful, strong underwater and surface swimmer.	The beaver's shape helps make it a fast swimmer.
The beaver's eyes have a transparent membrane that covers and protects the eyes.	Beavers can see well in and under the water.
The beaver's nostrils and ears can be closed.	Beavers can dive and swim underwater easily.
The tail of a large beaver may be 30 cm long, up to 18 cm wide, and 4 cm thick! It is covered with leathery scales and sparse, coarse hairs. Although the tail is fat, it is flexible and muscular.	Beavers steer in water by using their tails as a four-way rudder.
On land, the tail supports the beaver when it is sitting or standing upright.	The tail supports the animal when it is walking on its hind legs and carrying things in its front paws.
The beaver's hind feet are large, with five long, blunt-clawed toes that are webbed.	The hind feet propel the beaver when it is swimming.
The beaver's forepaws are small, without webs, and the toes end in long sharp claws that are good for digging. These delicate paws are almost like hands.	The beaver front paws can be used for digging and building. It can also carry things like sticks and mud, and groom its coat.
The second toe on each hind foot is double-clawed. The claws are hinged to come together like tiny pliers.	The hind foot helps with grooming.
The beaver's fur is very dense, with a mat of fine underfur about 2 cm long and an outer layer of heavy guard hairs that are about 7 cm long. Constant preening (grooming) and oiling keeps this dense pelt waterproof.	Even after swimming underwater for six or seven minutes, the beaver is not wet to the skin. The fur also keeps the beaver warm in the cold.
The beaver's long, sharp, strong front teeth on top and bottom grow continuously and are hardened with dark orange enamel. As the upper and lower incisors are ground against each other through constant use, the outer tips of these teeth stay as sharp as chisels.	A beaver can use these teeth to cut down very large trees, as well as small brush.