

BEAVER: K-3 Cheat Sheet

Choose a student or classroom volunteer with a good sense of humor to transform into this class guest.

Introduction: *Today we have a special guest visiting our class. Our guest was born with some special features that help it survive in the places it lives. These special features are called 'adaptations'. We are going to turn (insert volunteer's name) into our guest. I'll tell you about each 'adaptation' as I add it to (insert volunteer's name). Your job is to guess where our guest likes to live- and what kind of creature our guest is. If you think you know either answer, what do you need to do? (Raise a hand and wait to be called on- no shouting answers out!).*

Begin adding each adaptation listed below. After you add each, prompt ask students if they have a guess as to where this creature lives, what it may be- and why do they think that? If students guess the answer before completion- ask them what adaptations are still missing and have them describe how these special features helps it survive where it lives.

1. **Underwater vision (swim mask):** This creature has a clear eyelid that protects its eyes and allows it to see in the water while swimming.
2. **Valves in ears and nose (cotton balls for ears):** Special valves close as this creature dives underwater, which allows it to dive deeper and be underwater longer.
3. **Waterproof coat (brown towel w/ hole to go over head):** This creature produces oil called castor oil that it rubs through its fur, making the fur water proof. Dense under-fur acts as insulation. The waterproof fur keeps the skin dry and warm while our guest is in cold water.
4. **Webbed-hind feet (swim fins):** Large hind feet have webbing of skin between the toes, which are good for strong swimming while front feet used like hands.

5. **Cutting down trees (card board front teeth):** Our guest has large, ever-growing, chisel shaped teeth. This creature chews through the bark of trees to eat the soft, sugary layer between the bark and wood of the tree. This layer is called the cambium layer. The ability to chew through wood also provides our guest with woody branches to use in making his dam and lodge.

6. **Flat, wide tail (cardboard tail):** Acts as a rudder while they swim and can be used for communication between beavers and to startle predators by the beavers slapping it on the water as they dive. The tail also stores fat in the Fall and Winter and acts as a heat radiator releasing excess heat from its furry body during the warmer months.

<http://www.torontozoo.com/adoptapond/curriculum/f1-beaver.html#adaptations>