Suggested Number of Volunteers: 1-2

Materials in Activity Tub:
- Skulls:
  - coyote
  - fox
  - bobcat
  - raccoon
  - skunk
  - squirrel
  - beaver
  - deer
- Replitracks:
  - coyote
  - fox
  - bobcat
  - raccoon
  - skunk
  - squirrel
  - beaver
  - deer
- Pelts:
  - coyote
  - fox
  - bobcat
  - raccoon
  - skunk
  - beaver

Materials Provided by the Group:
• none

Objectives
Students will:
1. Learn about the different types of teeth and how each are used by the animal;
2. Learn what a herbivore, omnivore, and carnivore are and how to tell which an animal is based on their teeth.

Background:
You can tell a lot about an animal simply by looking at its skull, pelt and tracks. By looking at the skull, you can almost instantly tell if the animal is an herbivore, an omnivore, or a carnivore.

An herbivore is an animal which eats exclusively plants and plant materials like seeds, nuts, or flowers.

A carnivore is an animal which eats exclusively meat or other animals. They eat no plant material.

An omnivore is an animal which eats both plants and meat.

By looking at the skull, you can also tell if the animal is a predator or a prey species. Animals which are predators typically have their eyes at the front of their head. (Coyote) This allows these species to have greater depth-perception and be better hunters. Prey species, on the other hand, typically have their eyes on the side of their head. (Deer) This allows these species to be able to see all around them and constantly be on the look-out for predators.

An animal’s tracks also tell you a lot about the animal. If the tracks are webbed, like a beaver, this is a good indication that the animal spends a lot of time in water. Or, if the track has large claws, like a badger, this can indicate that the animal is a digging animal.

The pelt of an animal can often tell you where the animal lives. For example, the colors of the coyote indicate that it would be best camouflaged in the pairie. Or, the double-layered hair of the beaver tells you it lives in water (the longer guard hairs help repel water while the “fuzzy” underhair helps the beaver stay warm even in cold winter waters.

The skunk is interesting because it is clearly not camouflaged. The skunk is black and white colored as a warning to other animals to steer clear or you may get sprayed!
Often you can tell if the animal was harvested in the winter or in the summer. A good example of this is the badger. A badger’s fur is lighter in the winter (more white) to help it blend in with the prairie snow. While in the summer, the badger’s hair is darker (more brown/grey) to help it blend in with the vibrant summer colors.

Procedure:

**Before the Activity**
Layout skulls, pelts and tracks on the table. You can have a skulls section, a pelt section, and a tracks section, or you can place each skull and track next to the corresponding pelt.

**The Activity**

1. Discuss with participants what an herbivore, omnivore, and carnivore are. Show participants the skulls and begin to identify the teeth of several skulls - an herbivore skull, and omnivore skull, and a carnivore skull.

Point out differences in the three types of teeth. For example, show participants that coyotes teeth are sharp for tearing meat, or deer teeth are for grinding plants.

Ask Participants:
- Can you find a skull of an omnivore?
- Can you find a skull of a carnivore?
- Can you find a skull of a herbivore?
- Do humans have sharp or flat teeth? (Both.)
- If humans have both sharp and flat teeth, what does that indicate? (That we are omnivores.)

2. Discuss other aspects of the skulls. For example, point out the eye position on predator skulls vs. prey skulls.

Ask Participants:
- Based on eye placement, can you find the skull of a predator?
- Based on eye placement, can you find the skull of a prey species?
- Where are the eyes on a human’s head located?
- What does the eye placement on a human’s head tell us? Are humans a predator or prey species?

3. Discuss tracks. Ask participants:
- How does the design of its feet help an animal move?
- Is this animal required to move fast? (Run after prey? Run from predators?)
- Does the track have claws? How would this help the animal?
- How would webbed feet help the beaver?

4. Allow participants to look (and touch!!) the pelts. Ask participants to correctly identify the animal based on the pelt (or the pelt, skull, and track together).

Ask Participants:
- Why does the beaver have two layers of fur?
- The skunk is clearly not camouflaged. Why is the skunk black and white?
- What is the advantage of the bobcat’s spots?

Helpful Hint:
Discuss and ask the kids questions about the different items available. Make sure to ask THEM questions and give them hints to enable THEM questions and give them hints to enable THEM to come to the answer on their own. Also encourage participants to ask you questions about the items.

You can also lay pictures of each of the animals on the table and ask participants to match the skull, pelt and track to the correct picture.

Or, you can have participants match the skull and track to the pelt.