

3. Ice Cream Plants and Animal Skull Discovery

Time: 20-25 minutes

Supplies:

- At least 3 pieces of wrapped candy for each student.
- Skulls or skull pictures
- Skulls worksheet

Background:

Who likes ice cream? What kinds of ice cream do you like? Are there flavors that you don't like?

Animals are the same way. Cows will eat plants that deer won't and that's why they can coexist on the range. They eat different plants, so they don't always compete.

Directions:

1. Tell students that they are NOT to eat the candy; they are going to do an activity first.
2. Hand each student at least 3 pieces of candy (1 from each flavor)
3. Have the students split the candy into 2 different groups.
 - Group 1: their **favorite** flavor.
 - Group 2: the candies that they **like the least**.
4. Plants that the animals like are what we are going to call ice cream plants—because it is their favorite. These plants are the tastiest for some animals just like ice cream is tasty to us. Plants they don't like as much are going to be called celery plants.
5. Explain to students that land managers use different grazing management systems (you will learn more about grazing systems in Section 7) so that the ice cream plants will have time to grow back and reseed so that there will always be enough ice cream plants.
 - For example: one grazing system you will learn more about is the “Rest Rotation” grazing system. This rotation allows one pasture to rest (i.e., no grazing) for one whole year allowing the plant to grow and reseed. This is great for ice cream plants.
 - Another example: “Continuous” grazing system. This is a good strategy when you have a lot of celery plants. It forces the animals to eat plants that are good for them (at least during part of the season) but is not their favorite. Continuous grazing is used on cheatgrass monocultures (dominated by one species) for example. Cheatgrass in the spring has high protein (nutritious) so with continuous grazing, we can reduce the amount of cheatgrass which may lower wildfire risk in the summer (learn more in Section 6).

Animal Skull Discovery:

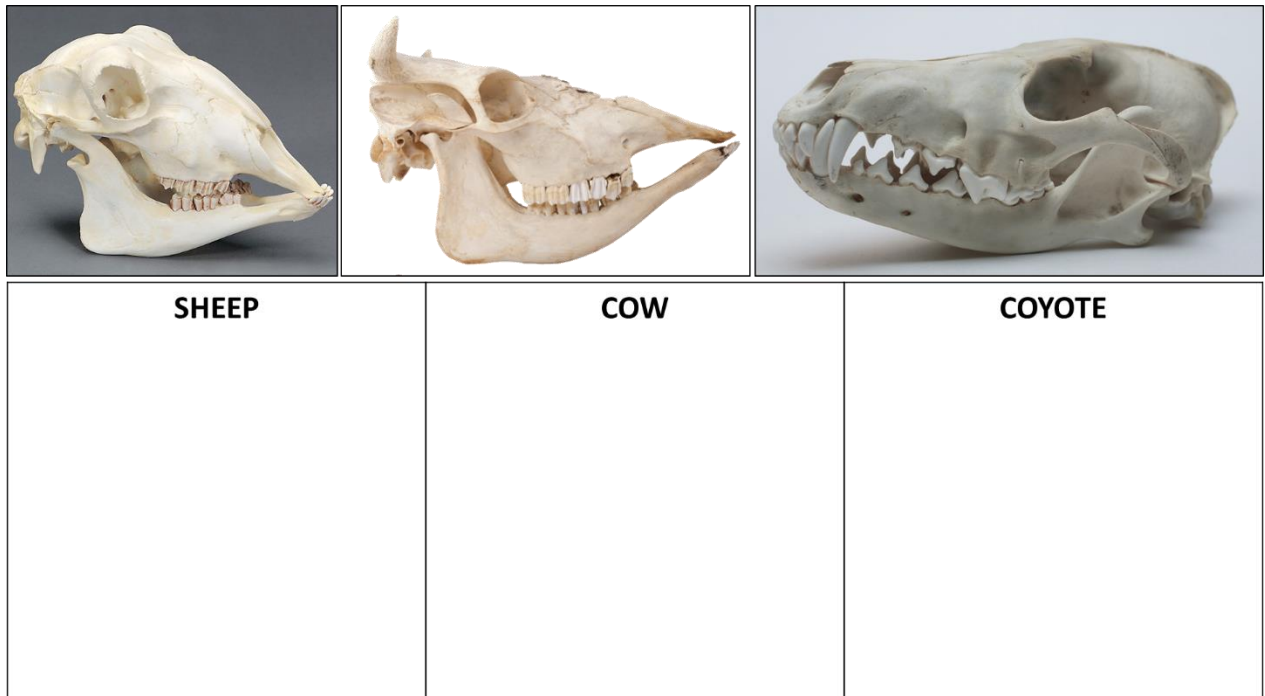
Do:

Show the various skulls pictures and lead the following discussion:

- Discuss how **sheep** graze. Show students the sheep skull (*pictures will work*)—note that sheep teeth influence what they eat.
 - The split lip allows sheep to pick the preferred leaves off of the plant.

- The bottom front incisors are sharp like knives, and the back teeth grind the plants.
- **Cattle** have similar teeth to sheep, but cattle chew their cud several times. How does that affect what they eat?
- The next skull is a **predator**.
 - What are predators? What are prey? Can an animal be both a predator and prey?
 - A predator is an organism that eats another organism; Prey is the organism that predators eat.
 - Top predators, like cougars and bears, are only predators. Most other wildlife species (carnivores) can be both.
 - *In this exercise, predators are carnivores, prey are herbivores (it should be noted that carnivores can eat carnivores as well, but for today's activity that is not the case).*

Have students compare the skulls. What is similar, what is different?



Reflect:

- Why do predators have sharp teeth?
- Why does the coyote have more teeth than the sheep?
- How does the shape of the animals teeth affect the type of food it eats.

Explain to students the importance of both predator and prey in the environment. Without both, the ecosystem would be unbalanced.

Remind students that each animal species occupies its own niche (as learned in the last few sections), which enables the animals to share the same habitat.