

Beef – Ruminant Relay

15
minutes

Cattle can eat foods that humans cannot since cattle and other ruminants have four stomachs.

Materials: 4 hula hoops, feed trough or bowl, 30 green pipe cleaner pieces or strips of paper

1. What are your favorite foods? Ask students to point to their stomachs. Our stomach's job is to break down food so our bodies can use its energy and nutrients. I noticed no one mentioned grass as a favorite food. In fact, humans should not eat grass. Our stomachs cannot break it down, and it can make us sick.
2. Cattle can eat grass, though. Cattle are called **ruminants** because they have four stomachs, which break down the grass. Ruminant animals include cattle, goats, sheep, buffalo, and elk.
3. Set up: Spread out the 4 hula hoops in a large grassy area or open space. The hula hoops will be the **4 stomachs** in cattle. Place 30 pipe cleaners in a feed bowl to represent **grass**. Divide students evenly into 5 groups and assign the group a station either at a hula hoop or the feed trough.
4. The goal is to move the grass through the stomachs as quickly as possible. Each student may only carry one piece of grass at a time.
 - Students at the feed trough will pick up one piece of grass from the feed trough and run to the first hula hoop stomach, then return to the feed trough to collect another piece of grass.
 - Students at the first stomach will carry grass to the second stomach.
 - Students at the second stomach will carry the grass to the third stomach.
 - Students at the third stomach will carry grass to the fourth stomach.
 - Students at the fourth stomach will carry grass back to the feed trough and the cycle will continue.
 - All students repeat their task for 3-5 minute until the teacher tells them to pause.
5. After several rounds, gather and reflect on their learning: How are humans and cattle different? How are they alike? What kind of habitat would be good for ruminant animals like cattle?



Observation

Six Words for Cattle

15
minutes

Farmers use a variety of words to describe animals. Let's learn some of the special terms for cattle.

Materials: photos of cattle

1. Farmers have special words that describe their animals. Many different words can be used to describe cattle. Write each vocab word on the white board. Show photos with examples and discuss ways the animals are similar or different.
 - **Calves** are baby cows. They are considered calves until they are about 1 year old.
 - **Cows** and **bulls** are the calves' parents. Cows are female. Bulls are male.
 - When farmers talk about **cattle**, they are talking about both cows and bulls.
 - **Dairy cows** produce milk. Farmers harvest the milk which can be processed into yogurt, cheese, ice cream and other dairy products.
 - **Beef cattle** are raised for their meat. Roast, ground beef, and jerky are types of beef.
2. Read the following clues. See if students can guess the word describing the animal.
 - *This animal is only a few months old. (Calf)*
 - *They are parents of calves. (Cow and bull)*
 - *Ice cream is made from milk that this animal produced. (Dairy cow)*
 - *Hamburgers are made from beef from this animal. (Beef cattle)*
3. Invite students to write additional clues. Older students could write their own or work together in small groups.

Tasting Activity

Beef

10
minutes

1. Before passing out any samples, review Brave Tasting Expectations, including "Don't yuck someone else's yum" and "We all wait and try together."
2. If possible, offer a variety of beef cuts for students to compare such as roast, ground beef, or jerky.
3. After tasting, ask students to voice their thoughts and "Vote with your thumb." Thumbs up, to the side, or thumbs down. I like it, it's okay, or no thank you.