

THE STAGE IS SET FOR BEEF

LESSON SNAPSHOT

RELATED “MY AMERICAN FARM” GAME

The Steaks are High
Available at www.myamericanfarm.org

GRADE LEVELS: Third - Fifth

CONTENT AREAS: Science, English Language Arts

STANDARDS

3-LS-1 Develop models to describe that organisms have unique and diverse life cycles, but all have in common birth, growth, reproduction and death.

Next Generation Science Standards

RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect. (3-PS2-3)

Common Core, English Language Arts

WHAT WILL YOU DO?

By the end of this activity students will:

- Create a model that illustrates the life cycle of beef cattle.
- Match the universal life cycle stages (birth, growth, reproduction, and death) to where they fit in the life cycle of beef cattle.

SUPPLIES YOU’LL NEED

- “Beef Life Cycle” graphic projected (provided)
- Blank paper(1 per student)
- Colored pencils or markers
- Projector and screen
- (Optional) Computers and internet access – 1 per student or pair, *This is only necessary if you wish to do the My American Farm game in class.
- (Optional) Headphones – 1 per student, *This is only necessary if you wish to do the game individually in class.

PREPARATION

- Visit My American Farm online (www.myamericanfarm.org) to preview “The Steaks are High” game.
- Review the lesson. There are a couple of places where you will see an asterisk (*). These are areas where you can choose to modify the lesson. To determine if you need to make these modifications, ask:
 - » How much time would you like to allocate for the activity?
 - » How would you like students to demonstrate what they’ve learned?

INTRODUCTION

SET CONTEXT FOR THE ACTIVITY

Step 1: Beef Brainstorm

- Ask students to think about their favorite meal made from beef. Elicit volunteers to share one each. If student only come up with a few, remind them that beef can be in a lot of their favorite meals (chili, tacos, spaghetti sauce)!
- Tell students that there are more than a million cattle ranchers in the United States that work hard everyday to produce delicious, safe, and nutritious beef for them and their families.
- Set context for day: Today we’ll explore more about how ranchers produce beef for our tables!

* Instead of the group brainstorm, you can instruct students to brainstorm as many meals as they can on their own. They can either write the meals in their notebooks or draw pictures of them.

BODY

MAIN CONTENT

Step 2: Stages in the Life Cycle of Beef Cattle

- Set context: Animals and plants all go through different stages in their life





cycles from birth to death. Today we're going to explore the life cycle of beef cattle and discover the places their life cycle unfolds!

- Project "Beef Life Cycle" graphic or re-create the graphic on the whiteboard.
- Explain the four major stages of the beef life cycle to your students:
 - » Cow-Calf Ranch: Calves are born on cow-calf ranches. They usually stay there until they are 7 months old. As they grow, they nurse less and learn to graze grass. They are then weaned from the mother cow and sold to different type of rancher called a stocker. Ranchers then breed the mother cow so she'll have another calf the next year! *Livestock Auction: When moving from the cow-calf ranch to the stocker ranch, cattle are usually sold at a live or online auction.
 - » Stocker Ranch: When the calves get to their new home at the stocker ranch, they graze on pastures. Stockers carefully manage the rangeland the calves are grazing on to protect the environment and make sure the calves get the nutrients they need to grow!
 - » Feed Yard: While some cattle graze on grass their whole lives, many go to a feed yard. At feed yards, cattle have free access to a nutritious diet for the 3 – 6 months before they are harvested.
 - » Processing facility: When it is time for cattle to be harvested, they are taken to a processing facility. At the processing facility they are humanely harvested and safely processed into beef and beef by-products.
- Make sure each student has a blank piece of paper. Instruct students to draw a line horizontally and vertically on their paper to create four quadrants.
- Instruct students to draw a picture in each quadrant that represents each stage in the life cycle of beef cattle. Remind them to draw arrows between the stages to depict the correct order of the stages.

- Instruct students to label their beef life cycle model where each of those stages happen. Remind them that more than one stage may happen at one location and two locations may represent the same stage. Monitor student progress and make corrections where needed.
- Correct labels:
 - » Cow-Calf Ranch: Birth & Reproduction
 - » Stocker Ranch: Growth
 - » Feed Yard: Growth
 - » Processing Facility: Death
- After all students have finished, have students share their model with a partner and explain why they illustrated their model the way they did.

Step 4: Play Game

- At this point you may elect to have students play "The Steaks are High", available at myamericanfarm.org. Students can work individually or in pairs.
- Inform students that they'll now have a chance to discover more fun facts about beef cattle and their life cycle by playing a game.

*You may choose to have students play this game before you arrive, after you have left, or at home with adult permission.

*The game is supported by audio. You may wish to secure headphones for students, or play the game as a class while displaying on a large screen.

WRAP UP

REVIEW, ASSESS, CHALLENGE

Step 5: What have you learned?

- Break the class into four groups and send them to different corners of the classroom. Assign each group a different location (cow-calf ranch, stocker ranch, feed yard, and processing facility).
- Instruct groups they have three minutes to create a silent skit or mime what happens at their location.

Step 3: Universal Stages in Life Cycles



- Set context: All animals and plants go through four universal stages in their life cycles: birth, growth, reproduction and death.



Provide them an example of miming an action.

- Have groups present their mime for the life cycle stage in order.
- When students return to their seats remind them that through the life of beef cattle, ranchers are committed to producing a safe, nutritious product for consumers. Challenge them to share what they learned with a parent or sibling next time they eat beef!

*If time doesn't allow for the mime activity, have one student present their drawing to the class and explain what is happening during the life cycle stages.

* This lesson provides a great opportunity to connect students with men and women who work in the beef industry.

- If you are a classroom teacher, reach out to your county Farm Bureau or State Beef Council for recommendations of people in the industry to connect with your class.
- If you are a volunteer educator, brainstorm contacts you have in the industry and serve as a resource for a local school!

TEACHING NOTES

FOUNDATION CONTACT INFORMATION

American Farm Bureau Foundation for Agriculture

A Contractor to the Beef Checkoff

600 Maryland Ave SW

Suite 1000w

Washington D.C 20024

Phone: 1.800.443.8456

Fax: 202.406.3756

E-mail: Foundation@fb.org



BEEF LIFE CYCLE

1 COW-CALF RANCH

2 AUCTION

3 STOCKER RANCH

4 FEED YARD

5 PROCESSING