

Lesson Plan:

Retail Cuts & Carcass Value

Grade Level: High School Agriculture (Animal Science & Agribusiness Pathways)

Duration: 50 minutes

Unit Placement: Animal Systems – Carcass Evaluation & Marketing

Topic: Beef Carcass Breakdown, Retail Cuts, and Value

Teacher Prep (Before Class)

1. Purchase the four beef cuts used in lesson: Ribeye, Beef Tenderloin (Filet), Chuck Roast and Ground Beef.
2. Print a [Beef Primal Chart](#) for each group.
3. Gather scales, butcher paper or trays, price sheets (pulled from current grocery ads).
4. Copy Student Worksheets (1 per student).
5. Write Bell Ringer question on board.

Learning Objectives

By the end of this lesson, students will be able to:

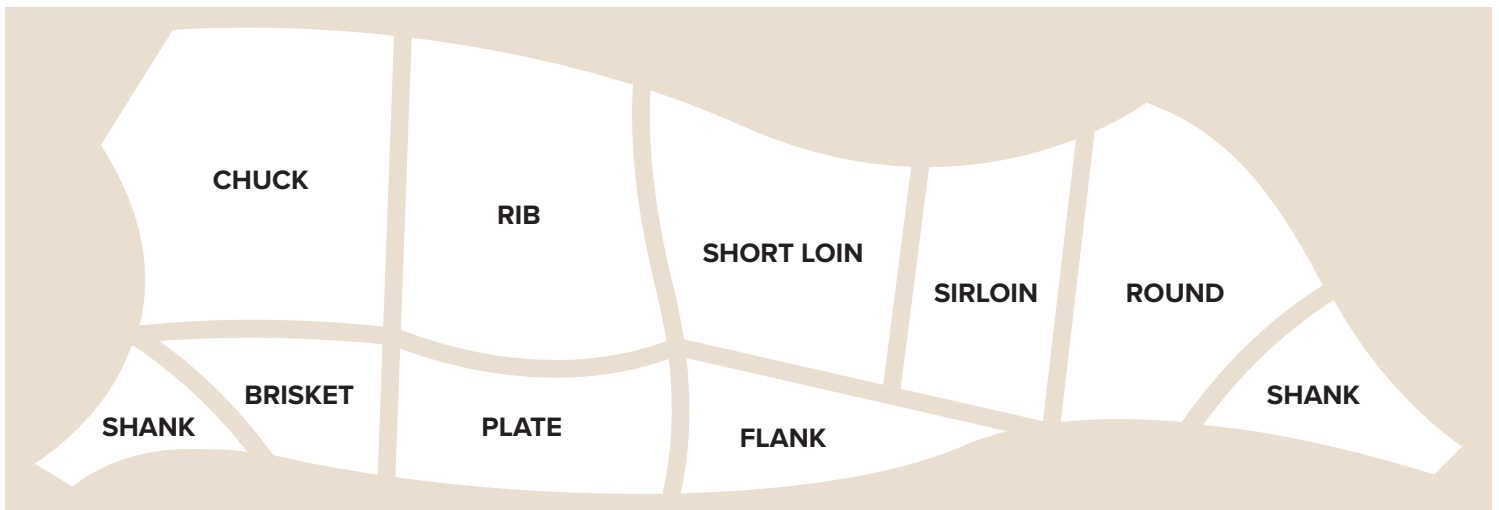
1. Correctly identify primal origins of common beef cuts.
2. Calculate total retail value of beef cuts using weights and prices.
3. Compare whole carcass value vs. retail breakdown value.
4. Explain how yield, quality, consumer demand, and labor/processing costs influence pricing.
5. Apply agribusiness principles to marketing beef products.

ODE Agricultural Standards

- Animal Systems 4.2: Evaluate carcass quality and yield.
- Agribusiness 2.1: Analyze supply, demand, and pricing in agricultural markets.

Materials Needed

- Ribeye Steak, Beef Tenderloin, 1 pound ground beef, chuck roast (Per group)
- Digital scales (1 per group)
- Beef primal chart (handout or projected)
- Local Grocery price reference sheet (*You will have to create based on local prices*)
- Index cards or labels for primal names
- Calculators or laptops/tablets with Excel/Google Sheets
- Whiteboard/markers or projector
- Student Worksheet (provided below)



Lesson Procedures:

1. Bell Ringer / Engagement (5 minutes)

- On board: “What beef cuts does your family buy most often? Why?”
- Students write answers in notebooks (2 minutes).
- Teacher asks 2–3 students to share aloud.
- Transition Script: *“Today, you’ll step into the role of a butcher and marketer. You’ll figure out how much money is in a beef carcass and whether it’s smarter to sell beef as a whole or as individual cuts.”*

2. Direct Instruction: Carcass Breakdown (10 minutes)

- Display Beef Primal Chart.
- Script:
 - “Beef carcasses are divided into primals — large sections such as rib, loin, round, and chuck. These are broken down further into subprimals, then retail cuts like ribeye steaks or roasts.”
 - “Each time a carcass is cut smaller, labor is added. That labor increases the final price. A ribeye steak costs more than a rib primal because it takes time, skill, and equipment to cut, trim, and package it.”
 - “So — price increases not only because of demand and tenderness, but also because of the labor required at each cutting stage.”
- Quick Think-Pair-Share: *“Which cuts probably take the most labor to prepare — steaks, roasts, or ground beef? Why?”*

3. Group Activity: Cut Identification & Pricing (30 minutes total)

Step A – Identification (5 minutes)

- Groups match cuts to primals using chart.
- Using index cards, challenge students to label each cut with the primal it came from.
- Teacher circulates, checking for accuracy.
- Review as a large group or within individual groups.

Step B – Weighing (5 minutes)

- Groups weigh each retail cut, record on worksheet.

Step C – Pricing (10 minutes)

- Students multiply weight × price/lb found on your grocery price reference sheet, then record totals.
- Teacher Check-In Prompt: “Notice how the steak is priced much higher per pound than the roast. Part of that is demand, but part is labor — someone had to carefully cut, trim, and package that steak.”
- Using the provided retail yield breakdown from a beef carcass, walk them through how to calculate the total value of each cut. For example, explain that a carcass produces multiple ribeye steaks (around 20), not just one. Therefore, students should calculate the value of one steak, then multiply it by the number of steaks to find the total ribeye value for the carcass.

Step D – Carcass Value Comparison (10 minutes)

- Teacher provides carcass weight and price (e.g., 800 lbs × \$2.25/lb = \$1,800).
- Groups total retail values and compare to carcass value.
- Script: *“This difference is called added value. Retail cuts bring more money, but that increase comes from added labor, packaging, storage, and marketing.”*

4. Class Discussion & Reflection (10 minutes)

Guiding Questions:

- Which primal generated the most value?
- Why does retail breakdown usually bring more money?
- How does labor affect the price of a cut?
- What hidden costs (processing, packaging, storage, labor) reduce profit margin?
- If you were in charge, would you sell carcasses whole or break them into retail cuts?

Notes:

About the Ohio Beef Council

The Ohio Beef Council (OBC) is a non-profit 501(c)(5) organization charged with the promotion and marketing of beef and beef products in Ohio. Checkoff dollars are used to increase beef demand through programs of promotion, research and education. The organization is directed by a 15-member Operating Committee of cattlemen appointed by the Ohio Director of Agriculture, representing the state’s beef and veal producers.