

3-5 Lesson

FARM
Food, Agriculture & Resources in Michigan
Science Lab



Cattle: Chew it Twice, Use it All

Grade Level: 3 rd -5 th grade	Topic: Beef	Estimated Time: 50 minutes
Brief Lesson Description: This lesson is an introduction to the role of cattle in agriculture through interactive and engaging activities. Students explore how cows digest food, the journey of beef from pasture to plate , and the various by-products derived from cattle. Students develop an understanding of ruminant digestion, sustainability, and food production , fostering inquiry-based learning and real-world connections to agriculture and science.		
Next Generation Science Standard Performance Expectation(s): <ul style="list-style-type: none">• 3-LS1-1: Develop models to describe that organisms have unique and diverse life cycles, but all have common birth, growth, reproduction, and death.• 5-LS2-1: Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.• 4-ESS3-1: Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.		
National Agricultural Literacy Outcomes: <ul style="list-style-type: none">• Agriculture and the Environment Explain how agriculture uses natural resources (soil, water, air, plants, and animals) to produce food and fiber.• Science, Technology, Engineering & Math (STEM) Understand how food and fiber production utilize physical and life sciences.• Food, Health, and Lifestyle Identify how food provides energy, growth, and sustenance.		
Specific Learning Outcomes: <ol style="list-style-type: none">1. Students will be able to explain how cattle digest food and why they can process grass while humans cannot.2. Students will describe the journey of beef from pasture to plate and understand the role of sustainability in cattle farming.3. Students will identify and categorize various beef by-products and their uses in daily life.		