HARVEST OF THE MONTH - JANUARY / BEEF

Grades 6-8

KANSAS STATE DEPARTMENT OF EDUCATION

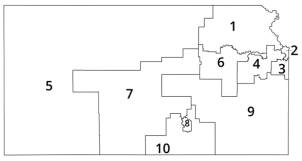
Kansas leads the world in the success of each student.

JULY 17, 2025

Kansas State Board of Education

BOARD MEMBERS

900 S.W. Jackson Street, Suite 600
Topeka, Kansas 66612-1212
(785) 296-3203
www.ksde.gov/board



DISTRICT 1

Danny Zeck
Vice Chair
Danny.Zeck@ksde.gov

DISTRICT 2

Melanie Haas
Melanie.Haas@ksde.gov

DISTRICT 3

Michelle Dombrosky
Michelle.Dombrosky@ksde.gov

DISTRICT 4

Connie O'Brien
Connie.O'brien@ksde.gov

DISTRICT 5

Cathy Hopkins
Chair
Cathy.Hopkins@ksde.gov

DISTRICT 6

Dr. Beryl A. New
Beryl.New@ksde.gov

DISTRICT 7

Dennis Hershberger
Dennis.Hershberger@ksde.gov

DISTRICT 8

Betty Arnold
Betty.Arnold@ksde.gov

DISTRICT 9

Jim Porter
Jim.Porter@ksde.gov

DISTRICT 10

Debby Potter
Debby.Potter@ksde.gov

SUCCESS DEFINED

A successful Kansas high school graduate has the

- Academic preparation,
- Cognitive preparation,
- Technical skills,
- Employability skills and
- Civic engagement

to be successful in postsecondary education, in the attainment of an industry recognized certification or in the workforce, without the need for remediation.

OUTCOMES

- Social-emotional growth
- Kindergarten readiness
- Individual Plan of Study
- Civic engagement
- Academically prepared for postsecondary
- High school graduation
- Postsecondary success

Kansans CAN

MISSION

To prepare Kansas students for lifelong success through rigorous, quality academic instruction, career training and character development according to each student's gifts and talents.

VISION

Kansas leads the world in the success of each student.

MOTTO

Kansans Can

COMMISSIONER OF EDUCATION

Dr. Randy Watson
Randy.Watson@ksde.gov

DEPUTY COMMISSIONER
Division of Fiscal and Administrative Services

Dr. Frank Harwood
Frank.Harwood@ksde.gov

DEPUTY COMMISSIONER
Division of Learning Services

Dr. Renee Nugent
Renee.Nugent@ksde.gov

Kansas leads the world in the success of each student.

July 1, 2025

HARVEST OF THE MONTH

January / Beef

INTRODUCTION

Over the next few weeks, we will be learning about a kind of food that we harvest in Kansas. I'm going to give you some clues to see if you can guess what this food is.

- This is another type of food we get from cattle.
- Its an excellent source of protein and give us 10 essential nutrients including B-vitamins, zinc, and iron that give us energy, helps us to have strong muscles and help keep us healthy.
- This type of food can include things like hamburgers, steak, and roasts.

Can you guess what food I'm talking about? We will be learning about Beef!

VOCABULARY

Sustainable Nutrition: meeting the needs of the present without compromising the ability of future generations to meet their needs

Food Security: the state of having reliable access to a sufficient quantity of affordable, nutritious food

Cow: a mature female that has had a least one calf

Heifer: a young female that has not had a calf

Bull: a mature male capable of reproduction

Steer: a neutered male

GENERAL RESOURCES

Kansas Corn Commission

Kansas Beef Council

ENGAGE

In this lesson, students will explore the benefits of beef in a nutritious diet, see real-life examples of Kansas beef production, and discuss the connections between different types of farmers. To get students thinking about connections in ecosystems, write the word "Connection" on the board, on a slide, or in individual student notebooks. Then have students silently think about the following prompt: "What is the connection between corn farmers, cattle ranchers, and middle school students?" Once students have had ample thinking time, have them turn to partners or in a group to discuss what they came up with. Guide the discussion to make connections between what corn farmers plant will feed the cattle and become the protein we need for our bodies to be healthy.

EXPLORE

To start this section, students will use a station rotation method to learn more about the role beef plays in our everyday lives. Use a graphic organizer for students to track their learning as they visit each station. Be sure to include prompts that elicit student understanding about the nutritional value of beef, its role in the food supply, where beef and other types of livestock or crops are grown, and the beef life cycle.

- Five Nutrition Tips for Student Athletes[1]
- Beef in a Sustainable Diet[2]
- Virtual Tour of Beef Production Ranches[3]
- What do Cattle Eat in the Winter?[4]

1 https://www.kansasbeef.org/health-wellness/5-nutrition-tips-for-student-athletes
2 https://www.beefitswhatsfordinner.com/raising-beef/beef-in-a-sustainable-diet
3 https://www.beefitswhatsfordinner.com/raising-beef/360-videos
4 https://www.kansasbeef.org/on-the-farm/what-do-cattle-eat-in-the-winter

EXPLAIN

At this stage of the lesson, students are going to create an "elevator speech" to explain the role beef plays in our everyday lives. Students should use a graphic organizer to identify what their topic sentence will be, organize the main ideas from their stations, and a summative conclusion. Have student record and share their speeches using platforms like Flipgrid or Padlet.

ELABORATE

Have students research man-made beef alternatives. They can create a list of pros and cons and/or share any experience they have had with the alternatives with their classmates by using visual aids or video.

KANSAS SCIENCE STANDARDS ADDRESSED

MS. Matter and Energy in Organisms and Ecosystems

Students who demonstrate understanding can:

MS-LS2-1

Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.

Clarification Statement:

Emphasis is on cause and effect relationships between resources and growth of individual organisms and the numbers of organisms in ecosystems during periods of abundant and scarce resources.

The performance expectations above were developed using the following elements from the NRC document A Framework for K-12 Science Education.

Science and Engineering Practices

Analyzing and Interpreting Data
Analyzing data in 6–8 builds on K–5 experiences and progresses to extending quantitative analysis to investigations, distinguishing between correlation and causation, and basic statistical techniques of data and error analysis.

- Analyze and interpret data to provide evidence for phenomena.

Disciplinary Core Ideas

LS2.A: Interdependent Relationships in Ecosystems

- Organisms, and populations of organisms, are dependent on their environmental interactions both with other living things and with nonliving factors.
- In any ecosystem, organisms and populations with similar requirements for food, water, oxygen, or other resources may compete with each other for limited resources, access to which consequently constrains their growth and reproduction.
- Growth of organisms and population increases are limited by access to resources.

Crosscutting Concepts

Cause and Effect

- Cause and effect relationships may be used to predict phenomena in natural or designed systems.

MS. Interdependent Relationships in Ecosystems

Students who demonstrate understanding can:

MS-LS2-2

Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems

Clarification Statement:

Emphasis is on predicting consistent patterns of interactions in different ecosystems in terms of the relationships among and between organisms and abiotic components of ecosystems. Examples of types of interactions could include competitive, predatory, and mutually beneficial.

The performance expectations above were developed using the following elements from the NRC document A Framework for K-12 Science Education.

Science and Engineering Practices

Constructing Explanations and Designing Solutions

Constructing explanations and designing solutions in 6–8 builds on K–5 experiences and progresses to include constructing explanations and designing solutions supported by multiple sources of evidence consistent with scientific ideas, principles, and theories.

- Construct an explanation that includes qualitative or quantitative relationships between variables that predict phenomena.

Disciplinary Core Ideas

LS2.A: Interdependent Relationships in Ecosystems

- Similarly, predatory interactions may reduce the number of organisms or eliminate whole populations of organisms. Mutually beneficial interactions, in contrast, may become so interdependent that each organism requires the other for survival. Although the species involved in these competitive, predatory, and mutually beneficial interactions vary across ecosystems, the patterns of interactions of organisms with their environments, both living and nonliving, are shared.

Crosscutting Concepts

Cause and Effect

- Patterns can be used to identify cause and effect relationships.

A sample of Kansas ELA Standards addressed in this unit is listed below. For details and specific grade level standard alignment, see: Kansas 2023 English Language Arts Standards[5]

Reading Foundations: Standard 3; using grade-level phonics and word reading skills

Reading Literature: Standard 1; asking and answering questions about a text

Reading Literature: Standard 4; word meaning/ word choice

Reading Information: Standard 3; Describe the relationship between historical events, scientific ideas, or concepts

Reading Information: Standard 12; word meaning/ nuances

Writing: Standard 3; writing effective narratives to share experiences/ information with effective word choice and relevant details

Speaking and Listening: Standard 4; effectively presenting ideas and detailed/ sequenced descriptions with others

5 https://www.ksde.gov/Portals/0/CSAS/Content%20Area%20(A-E)/English_Language_Arts/Kansas%20Standards%20for%20English%20Language%20Arts.pdf

For more information, contact:

Eryn Davis
Farm to Plate Project Coordinator
Child Nutrition and Wellness

(785) 296-5060
Eryn.Davis@ksde.gov

Kansas State Department of Education
900 S.W. Jackson Street, Suite 102
Topeka, Kansas 66612-1212

https://www.ksde.gov

KANSAS
STATE DEPARTMENT OF
EDUCATION

Kansas leads the world in the success of each student.