

FEEDING THE PLANET



FROM RANCH TO LAB

Factory farming harms the environment with its greenhouse gases. Growing meat in a lab could be a solution.

LEXILE: 1060L (890L alternate reading level)

SOCIAL STUDIES (NCSS) STANDARD: Science, Technology, and Society

COMMON CORE (CCSS) STANDARDS: RI.6-8.1, RI.6-8.3, RI.6-8.9, W.6-8.2

ENGAGE THE READER

Read aloud the article's headline, "From Ranch to Lab," and ask: What do you think this article is about? Then have students scroll through the photographs and read the captions. Ask: What can we learn about the article through the photos and captions? How do you think scientists grow meat? Take a poll of the class before and after reading the article. Ask whether students would try lab-grown meat.

QUESTIONS FOR CLOSE READING AND DISCUSSION

- Why are scientists growing meat in labs? Do you think this is a good idea? Explain.
- Mark Post of Mosa Meat says a half gram of cow muscle could possibly be used to make up to 4.4 billion pounds of beef. How is this possible? What process is used to produce lab-grown meat?
- What challenges does the lab-grown meat industry face, and why? What do these challenges tell us about the effort to fight climate change?

EXTEND LEARNING

Remind students that the section "In Development" describes cattle ranchers' effort to ban the sale of meat grown in a lab. Ask: How is language important in the debate over lab-grown meat? What argument is the United States Cattlemen's Association making? Do you think it will work? Why or why not?

Have students imagine that they are working for Mosa Meat. Their job is to create a marketing campaign for lab-grown meat. The campaign might consist of a commercial, a press release, or a packaging design for a Mosa Meat product. Ask: What language will you use to describe your product? How will you convince the government and consumers to support your product? Students can find information about the company's production process and philosophy on [Mosa Meat's website](#). They can also access a [press kit](#) and [images](#) to use in their campaign.

COVER STORY QUIZ + ANSWER KEY

The cover quiz can be found on page 3 of this guide.
For the Google Forms quiz, click [here](#).

- 1. A** (RI.2) **2. B** (RI.1) **3. D** (RI.4) **4. B** (RI.6) **5. D** (RI.5)
6. B (RI.9) **7. Answers will vary.** (W.8)



A DISRUPTED REOPENING

U.S. students return to school after winter break as COVID-19 cases rise to record levels.

LEXILE: 1070L (980L alternate reading level)

SOCIAL STUDIES (NCSS) STANDARD: People, Places, and Environments

COMMON CORE (CCSS) STANDARDS: RI.6-8.1, RI.6-8.4, RI.6-8.5, RI.6-8.6

BEFORE READING

Have students share their experience returning to school after the winter break. Ask: How has the COVID-19 pandemic affected your return to school? What measures is your school taking to keep students safe? What concerns do you have, and why? How are your classmates doing? What do you expect will happen in the coming weeks?

Then post on the board or read aloud the article's headline, "A Disrupted Reopening." Ask: What does the headline imply about U.S. students' return to school? Do you think the headline reflects your experience? Explain.

DISCUSSION QUESTIONS

- What is Omicron? How has it driven the recent surge in COVID-19 cases?
- Why have many school districts decided to return to in-person learning? Why have some schools decided to hold classes remotely for now? Is there an approach you agree with more? Elaborate.
- Whose perspectives are included in the article, and why? What other perspectives would you like to see, and why?



MEET ORION

Orion Jean is always searching for ways to help others. He's one of five finalists for Kid of the Year.

LEXILE: 940L (810L alternate reading level)

SOCIAL STUDIES (NCSS) STANDARD: Individual Development and Identity

COMMON CORE (CCSS) STANDARDS: RI.6-8.1, RI.6-8.3, RI.6-8.8, W.6-8.1

BEFORE READING

Explain to the class that TIME will announce its second Kid of the Year in February, and that students are going to read about one of the finalists. His name is Orion. His specialty is helping others. Have students note his achievements as they read.

DISCUSSION QUESTIONS

- How did Orion start his quest to help people in need? What do you think motivates him?
- If you asked Orion about his philosophy on leadership, what do you think he would say? Explain.
- What words do you think best describe Orion's character? Support your response with details from the article.

CLOSING ACTIVITY

Have students visit the [National Kindness Speech Contest](#) website to watch Orion deliver his prizewinning speech on kindness. Ask: What makes Orion's speech effective? Which statements do you find most persuasive, and why? How does Orion use gestures to convey his message? Then, challenge students to write and record their own speeches on kindness. Have the class view the speeches, evaluating their messages and rhetorical strategies.

Name _____ Date _____

Use this week's cover story, "From Ranch to Lab," to answer the questions below. For questions 1–6, circle the letter next to the best answer. If you need more space to write your response to question 7, you may use the back of this page.

<p>1. According to the article, which problem could be solved with lab-grown meat?</p> <p>A. greenhouse-gas emissions from factory farming</p> <p>B. worldwide food shortage</p> <p>C. dwindling livestock populations</p> <p>D. bad-tasting burgers</p>	<p>4. The author writes, "Lab-grown meat could soon be a \$25 billion industry." This could indicate that</p> <p>A. people are likely to give up meat because of its high cost.</p> <p>B. the likely economic rewards are partly driving the lab-grown meat industry.</p> <p>C. lab-grown meat is too expensive to produce in large quantities.</p> <p>D. companies like Mosa Meat won't make much money.</p>
<p>2. At Mosa Meat, scientists grow meat from</p> <p>A. plant-based material.</p> <p>B. cow cells.</p> <p>C. cells from fish and other animals.</p> <p>D. cat treats.</p>	<p>5. The section "In Development" is mostly about</p> <p>A. how companies are trying to bring down the cost of lab-grown meat.</p> <p>B. how good lab-grown meat tastes.</p> <p>C. cattle ranching.</p> <p>D. the challenges confronting the lab-grown meat industry.</p>
<p>3. Biologist Johanna Melke says the way we currently produce our meat supply is unsustainable. She means that it</p> <p>A. cannot supply enough meat to feed everyone.</p> <p>B. produces too much meat, which is driving costs down and impacting cattle ranchers.</p> <p>C. will deplete the world's cow populations, making meat scarce.</p> <p>D. will cause irreparable harm to our environment.</p>	<p>6. The photograph in the section "Something Fishy" likely shows</p> <p>A. artificial hamburger.</p> <p>B. fish maw, a part of the fish that's popular in China.</p> <p>C. fish tails, a cheaper substitute for fish maw.</p> <p>D. crab bisque.</p>

7. Would you buy meat that was grown in a lab? Why or why not?
