# TIMEEDGE

EDITION 6-8 TEACHER'S GUIDE VOL. 12, NO. 15 JANUARY 21, 2022

## UP IN THE AIR



## THE SKY'S THE LIMIT

Companies are investing in drone delivery services. Do the benefits outweigh the risks?

LEXILE: 1070L (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.6-8.8, W.6-8.1

### **ENGAGE THE READER**

Before students read the article, find out what they know about drones and get them thinking about the possibilities in the technology. Ask: What is a drone? What are drones used for? How might drones be used in the future? What problems might drones help us to solve? What problems might they cause? Then, as they read the article, have students make note of details that could strenghten their ideas about drones.

## **QUESTIONS FOR CLOSE READING AND DISCUSSION**

- Why do you think companies like Amazon are interested in delivering by drone? Do you think consumers will prefer drone deliveries to ground-based deliveries? Why or why not?
- "More drones means more warehouses," says Costa Samaras. Why would this be a problem?
- Do you think the benefits of drone delivery outweigh the risks? Explain.

#### **EXTEND LEARNING**

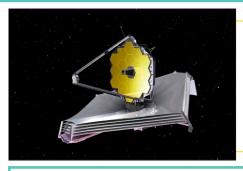
The greatest power to convince companies like Amazon to be more environmentally responsible lies with consumers, who have the power of the purse. But as your students have likely noticed, weighing the benfits of drone delivery against its potential harms is complicated, as the full consequences have yet to be seen. Still, there is a chance for consumers to shape that future.

Challenge students to write a persuasive essay in the form of a letter to Amazon. Students might propose a vision for responsible and/or profitable drone delivery, or they might discourage it altogether. Either way, they should acknowledge the complexity of the issue, by illustrating how the benefits of drones might be weighed against their drawbacks. Students can find more ideas to support their proposals in articles located in the Environment section.

### **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. B** (Rl.3) **2. B** (Rl.1) **3. B** (Rl.5) **4. D** (Rl.6) **5. A** (Rl.7) **6. A** (Rl.8) **7.** Answers will vary. (W.8)



## **GRAND OPENING**

NASA's new space telescope will search for evidence of how galaxies formed, more than 13 billion years ago.

LEXILE: 1040L (820L alternate reading level)

SOCIAL STUDIES (NCSS) STANDARD: Science, Technology, and Society COMMON CORE (CCSS) STANDARDS: RI.6-8.2, RI.6-8.5, RI.6-8.6, SL.1

### **ENGAGE THE READER**

As students independently read this news article on the James Webb Space Telescope, have them identify how the piece is structured and tell them to note the information contained in each section. Start a discussion by asking: What information does the beginning present, and why? What can this tell us about the structure of a news article? How do the paragraphs in the middle of the article support the story? Why does the article include this information? What other details might have been included? How does the author conclude the article? Why do you think that is?

## **DISCUSSION QUESTIONS**

- The author tells us that the telescope "unfolded its huge, flower-shaped mirror." Why do you think the author describes events in this way? How does this description help us understand the story?
- Who is quoted in the story? How does including them help the author tell the story?
- How does the author arrange the details about Webb's mirror? Explain why he made these choices.



## **NASA QUIETLY HAD A STELLAR YEAR**

Here are some of the space agency's biggest achievements of 2021.

SOCIAL STUDIES (NCSS) STANDARD: Science, Technology, and Society COMMON CORE (CCSS) STANDARDS: RI.6-8.1, RI.6-8.7, RI.6-8.9, W.6-8.2

#### **BEFORE READING**

Pair this article with other recent articles about NASA, which you can find at the bottom of the page. As students read, have them consider the following question: Why does TIME space writer, Jeffrey Kluger, call 2021 a "stellar year" for NASA?

## **DISCUSSION QUESTIONS**

- How is NASA able to achieve these feats? What does it take to drive space exploration and innovation?
- Why is space travel important to us? In what ways does space exploration affect our everyday lives?
- Which of NASA's achievements from the past year do you find the most exciting, and why?

#### **CLOSING ACTIVITY**

Have students dig deeper into the NASA projects they think are the most interesting. They can start at *nasa.gov*, which devotes a site to each of the projects described in the article. Group students according to their interests and have them find details that the article does not include. Each group should draw up a diagram or chart that combines text and illustrations, then present their discoveries to the class.

**COVER QUIZ** 

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Name	Date	)
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Use this week's cover story, "The Sky's the Limit," 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.

- 1. According to the article, what's an obstacle preventing Amazon's drone delivery service from getting off the ground?
  - A. the need for more electric delivery trucks
  - B. questions about the safety of flying drones
  - C. weather conditions
  - D. competition from companies like Wing

- **4.** The author includes the company Wing in the article in order to show that
  - **A.** competition from other companies is making it difficult for Amazon to invest in drones.
  - **B.** some companies are working to make drones safer for the the natural environment.
  - drone deliveries are automated but monitored by a pilot
  - **D.** companies other than Amazon see the benefits of delivering by air.

- 2. Which of these people founded Amazon?
  - A. Costas Samaras
  - B. Jeff Bezos
  - C. James Ryan Burgess
  - D. Patrick Lucas Austin

- **5.** Based on information in the article, what's another business experimenting with drones?
  - A. Domino's Pizza
  - B. Milk-Bone
  - C. Carnegie Mellon University
  - **D.** The Home Depot

- **3.** What is the section "Taking Wing" mostly about?
  - **A.** potential drawbacks of drone delivery services
  - **B.** how drone delivery would work
  - C. James Ryan Burgess's opinion about drones
  - **D.** the impact of air-space regulations on Wing's drone delivery service
- **6.** Which statement would Costas Samaras most likely agree with?
  - A. Energy-use at warehouses would contribute to greenhouse gas emissions.
  - **B.** Drone delivery is more eco-friendly than ground-based delivery in all situations.
  - **C.** Most consumers prefer drone delivery.
  - **D.** Drones would have minimal impact on wildlife.
- **7.** Which details in the article are most likely to shape your opinion about drone delivery, and why?