TIMEEDGE

EDITION 6-8 TEACHER'S GUIDE VOL. 13, NO. 20 MARCH 17, 2023

BUILDING THE FUTURE



UNDER CONSTRUCTION

Demand for 3D-printed homes is high—but availability is limited.

LEXILE: 1080L (930L alternate reading level)

SOCIAL STUDIES (NCSS) STANDARD: Science, Technology, and Society COMMON CORE (CCSS) STANDARDS: RI.6-8.3, RI.6-8.4, RI.6-8.8, W.6-8.1

ENGAGE THE READER

Tell students that they'll read an article about 3D-printed homes, and ask them to look at the top photo. Ask: What is a 3D-printed home? How is one built? Why might someone prefer a 3D-printed home to a traditionally built home? As students read the article, have them note details that confirm or challenge their ideas.

QUESTIONS FOR CLOSE READING AND DISCUSSION

- Aiman Hussein says watching a video of 3D building can be "oddly satisfying." What do you think makes this process satisfying to watch?
- Why aren't more homes built with 3D printers? What would have to change to make 3D-printed homes more mainstream? What problems might 3D-printed homes solve? Explain.
- Would you like to live in a 3D-printed home? Why or why not?

PAIRED TEXT AND WRITING

Pair this article with "No Artist Required" (March 17, 2023), about an author who used artificial intelligence (AI) to write and illustrate a children's book. As they read, have students respond to these questions: Can people be creative when using digital technology? How is using AI to produce a children's book similar to, and different from, using a 3D printer to build a house? How should we decide when, and when not, to use digital technology to make things? Then challenge students to write an essay that answers this question: Is digital technology good for us? Students should draw details from both articles in crafting their argument. Tell them that the most persuasive argument might not answer the question yes or no, but might discover a new way of posing the question about our relationship with technology.

COVER STORY QUIZ + ANSWER KEY

The cover quiz can be found on page 3 of this guide. To create a digital quiz, you can use our template <u>here.</u>

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



NEW OCEAN TREATY

A new U.N. treaty will protect marine life in the high seas.

LEXILE: 1080L (970L alternate reading level)

SOCIAL STUDIES (NCSS) STANDARD: People, Places, and Environments COMMON CORE (CCSS) STANDARDS: RI.6-8.1, RI.6-8.3, RI.6-8.4, SL.6-8.1

BEFORE READING

Ask students: What threats do the world's oceans face? (Students might cite pollution, plastics, rising temperatures, overfishing, etc.) Why is it important to protect oceans? What can be done to protect them? What role do governments play in protecting them? Tell students they will read about a new international effort to protect marine life in the high seas.

DISCUSSION QUESTIONS

- What makes the new U.N. ocean treaty historic? What measures might the U.N. to take to protect the high seas?
- The article says the treaty will protect "coastal biodiversity and the economies that depend on it." What is biodiversity, and how is it important to economies?
- Why is international agreement necessary to the protect oceans?



NO ARTIST REQUIRED

An author used artificial intelligence to create a children's book. Artists are not happy about it.

LEXILE: 1030L (850L alternate reading level)

SOCIAL STUDIES (NCSS) STANDARD: Science, Technology, and Culture COMMON CORE (CCSS) STANDARDS: RI.6-8.3, RI.6-8.7, RI.6-8.8, RI.6-8.9

BEFORE READING

Ask students: What have you heard about ChatGPT? (You might have to explain that ChatGPT is a chatbot, a computer program that uses artificial intelligence to imitate thinking and writing.)

DISCUSSION QUESTIONS

- Do you share artists' concerns about chatbots like ChatGPT? Why or why not?
- ChatGPT helped Reshi write the book and create its artwork? Would you say the chatbot is creative? Explain.
- What exactly is thinking? Do you think a chatbot thinks? Why or why not?

CLOSING ACTIVITY

Have students think about their favorite piece of music or writing, or their favorite painting. Ask: What makes it appealing? How does it feel to experience that work? Do you think a chatbot could have created it? Why or why not? What does it mean to be creative? Do you think Al could replace artists and writers? Explain. Students interested in reading more about artists working with Al and robots can read "Algorithm Art" (March 19, 2021).

COVER QUIZ

TIMEEDGE

Name	Date	

Use this week's cover story, "Under Construction," 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, use the back of this page.

- 1. Which is not true about 3D-printed houses?
 - A. Videos of 3D printing have gotten tens of millions of views on social media.
 - B. Many consumers would consider living in a 3D-printed house.
 - C. They cost more than traditional homes.
 - D. The biggest challenge facing the 3D-printed housing industry is scale.

- 4. How do the photographs support the central idea?
 - A. by showing new homeowners decorating their 3D-printed homes
 - B. by showing how many people are interested in 3D-printed homes
 - C. by showing details of the home-building process
 - D. by comparing 3D-printed home-building to traditional home-building
- 2. Which comes first in the process of putting up a 3D-printed house?
 - A. Dispensers pump out concrete.
 - B. A layout is created as a digital file.
 - C. A robotic arm layers concrete to build outer walls.
 - Inner walls are erected to create the shape of the house.
- 5. Where would you find information about the process of creating 3D-printed homes?
 - A. section 1, paragraph 3
 - B. paragraph 1 of "Welcome Home"
 - C. the caption "Move In"
 - D. the sidebar, "Homes in Hours"

- 3. What's the purpose of this article?
 - A. to inform the reader about using 3D printers to create homes
 - B. to describe how 3D printers work
 - C. to entertain the reader with descriptions of unique
 - to persuade the reader to support the construction industry

- 6. Which detail would be included in a summary of the article?
 - A. "The idea of 3D-printed houses has been gaining popularity."
 - B. "In December 2021, a Virginia family moved into a 3D-printed house."
 - C. "But getting people interested may be the first step."
 - D. "The process can be used to create anything from jewelry to furniture to the walls of a house."
- **7.** Would you consider living in a 3D-printed house? Why or why not?