Quick Check

You Can Print What?

Name	Date
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Instructions: Read each question carefully and choose the best answer.

- 1. What is the main idea of the entire book?
 - A Stereolithography is now the preferred method for creating prototypes, which began early in the twentyfirst century.
 - B Three-dimensional printing is the latest printing technology that makes models of almost anything.
 - © Engineers and scientists are developing ways to create real human organs using the layering technique.
 - Printing processes have a long history that reaches back to handmade techniques in ancient times.

- 2. What is a similarity between the xylography printing in ancient eastern Asia and the printing press invented in 1450 by Johannes Gutenberg?
 - A Both methods of printing use images carved out of a block of wood.
 - B Both methods take a long time to fill just one page with images.
 - © Both methods easily produce multiple copies of the same page.
 - D Both methods of printing apply a thin layer of ink to a flat surface.
- **3.** Which of the following shapes is **three-dimensional**?
 - (A) a square
 - B a triangle
 - (C) a pyramid
 - ① a circle

Quick Check (continued)

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- **4.** Why did Johaness Gutenberg's invention of the printing press have to come before Charles Hull's invention of 3D printing?
 - A The printing press was the first machine to layer material into a three-dimensional object.
 - B The technology of layering inked type using a tray is a predecessor to 3D printers layering material in a print bed.
 - © The 3D printers also use trays of arranged stamps to create their models like the ones used in the printing press.
 - ① The technology behind the printing press can be traced to the older process of xylography, or woodblock printing.
- **5.** Which word means *new* and original?
 - (A) innovative
 - (B) digital
 - (C) industrial
 - (D) excessive

- 6. How does the labeled photograph on page 9 improve the reader's understanding of three-dimensional printing?
 - A It shows readers the locations of the important components of a three-dimensional printer.
 - B It provides a sample of the various uses of threedimensional printing.
 - ① It shows readers a threedimensional object in the act of being created.
 - It clarifies the history of the technology leading into three-dimensional printing.

Quick Check (continued)

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- **7.** Which of the following statements is a fact about three-dimensional printing?
 - A Beauty the eagle can't hunt, eat, or preen herself without the use of her top beak.
 - B Three-dimensional printing is amazing technology that holds endless possibilities for the future!
 - © Making prototypes with a three-dimensional printer is far better than creating them by hand.
 - ① Stereolithography uses inkjet and laser printer technology to create three-dimensional objects.

- **8.** How is the information in the sidebar on page 10 organized differently from the information in the text?
 - A It is arranged in sections that use supporting details to expand upon a main idea.
 - B It uses paragraphs with transition words and details to paint a complete picture of the ideas described.
 - © It is arranged in a timeline that relates only the important dates and people connected with 3D printing.
 - ① It uses the same organization of sections and paragraphs but is simply much smaller in size.

Quick Check (continued)

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- **9.** What is the main idea of the section "The Future"?
 - A Charles Hull invented a process called stereolithography.
 - B The future of 3D printing holds endless possibilities.
 - © 3D printing is the latest technology for making models.
 - ① Astronauts could use 3D printing to repair their spacecraft.
- **10.** What is the author's purpose for writing this book?
 - A to inform readers about different types of art
 - B to persuade readers to avoid three-dimensional printing
 - © to entertain readers with stories of unusual homes
 - to inform readers about three-dimensional printing

- 11. Extended Response: Describe the main ideas and a few supporting details of two sections in the book. Then, explain how these sections and their main ideas are related.
- 12. Extended Response: The author uses expressions such as amazing, innovative, endless possibilities, and the preferred method to describe three-dimensional printing. On the basis of her descriptions, what are the author's feelings about the new method of printing? How would the book be different if the author's opinion on three-dimensional printing were the opposite of that expressed in the book?

Quick Check Answer Sheet

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Main Comprehension Skill: Sequence Events

- **1.** (B) Main Idea and Details
- 2. (D) Compare and Contrast
- 3. (C) Vocabulary
- **4.** B Sequence Events
- **5.** A Vocabulary
- **6.** (A) Make Inferences / Draw Conclusions
- 7. D Fact or Opinion
- **8.** (C) Text Structure
- **9.** (B) Main Idea and Details
- **10.** (D) Author's Purpose
- 11. Answers will vary. Example: The main idea of "Have a Heart—or a Liver!" is that engineers and scientists are using the layering technique of three-dimensional printing to create human organs. The section describes the process behind this innovative use of 3D printing. The section also explains why these printed organs may be better received by a patient's body than a transplant organ. The main idea of the section "A Home Like No Other" is that a team of architects is using a giant version of a 3D printer to build a house. Details that support this idea describe the bricks made from layers of plastic, how they fit together, and how long the house will take to be built. These sections are related because they both describe innovative uses of 3D printing to make our lives better.
- 12. Answers will vary. Example: Considering the descriptions the author uses in the book, I believe the author thinks 3D printing is a wonderful invention that will enhance our world. If the author had the opposite opinion, that 3D printing was a terrible idea, the book would have been full of examples of the negative effects of three-dimensional printing and not stories of the positive examples. She still might have described the history behind 3D printing, but then would have provided arguments for why two-dimensional printing remained the preferred method.