



COMPREHENSION QUESTIONS

HOT TECH: EXPLORING 3D PRINTING

1. Write a few sentences explaining the main ideas of Chapter 4.
2. What would you want to use a 3D printer to make?
3. When was the first 3D printer built?
 - A. 1981
 - B. 1983
 - C. 1988
4. Why could having more premade models help 3D printers' use spread?
 - A. People could print fewer types of things.
 - B. People could print more types of things.
 - C. The printers could work more slowly.



5. What does **gradually** mean in the *Exploring 3D Printing* book?

*The printer lays down one thin layer of plastic at a time. The layers **gradually** form the dragon.*

- A. all at once
- B. over time
- C. never

6. What does **organs** mean in the *Exploring 3D Printing* book?

*Right now, they can make simple body parts. But one day, they may print complex **organs** such as hearts and lungs.*

- A. parts of the body
- B. parts of a building
- C. parts of a book



ANSWER KEY FOR HOT TECH: EXPLORING 3D PRINTING

1. Answers will vary
2. Answers will vary
3. B
4. B
5. B
6. A



COMPREHENSION QUESTIONS

HOT TECH: EXPLORING ARTIFICIAL INTELLIGENCE

1. Write a few sentences describing the main ideas of Chapter 4.
2. Do you think it's okay to use AI even if it harms the planet? Why or why not?
3. When did a computer beat the world chess champion?
 - A. 1940
 - B. 1954
 - C. 1997
4. What might happen if AI keeps creating fake news?
 - A. People might not know what news is real.
 - B. People might create their own news.
 - C. People might get better at using AI.



5. What does **multimodal** mean in the *Exploring Artificial Intelligence* book?

*Experts also expect more **multimodal** AI. This type of AI can understand text, audio, images, and video.*

- A. able to do just one thing
- B. able to do many kinds of things
- C. able to do nothing

6. What does **replace** mean in the *Exploring Artificial Intelligence* book?

*Some people worry that AI will **replace** lots of jobs. Many people could be out of work.*

- A. take the place of
- B. change the color of
- C. be the same as



ANSWER KEY FOR HOT TECH: EXPLORING ARTIFICIAL INTELLIGENCE

1. Answers will vary
2. Answers will vary
3. C
4. A
5. B
6. A



COMPREHENSION QUESTIONS

HOT TECH: EXPLORING DRONES

1. Write a few sentences describing the main ideas of Chapter 2.
2. Do you think drones should be used for war? Why or why not?
3. When did the British military create the Aerial Target?
 - A. during World War I
 - B. during World War II
 - C. during the Vietnam War
4. How could a swarm of drones quickly search a large area?
 - A. Each drone could search a separate part of the area.
 - B. All the drones could search the same part of the area.
 - C. One drone could fly at a time.



5. What does **contests** mean in the *Exploring Drones* book?

*Some people race their drones in **contests**. They steer the drones through courses.*

- A. people who enjoy flying drones
- B. drones that can fly very fast
- C. events that people try to win

6. What does **improve** mean in the *Exploring Drones* book?

*Scientists are trying to **improve** drone batteries. That would help drones fly longer.*

- A. get rid of something
- B. make something worse
- C. make something better



ANSWER KEY FOR HOT TECH: EXPLORING DRONES

1. Answers will vary
2. Answers will vary
3. A
4. A
5. C
6. C



COMPREHENSION QUESTIONS

HOT TECH: EXPLORING ONLINE GAMING

1. Write a few sentences explaining the main ideas of Chapter 3.
2. Would you rather play games on a computer or a console? Why?
3. When did people create the first virtual world?
 - A. 1978
 - B. 2004
 - C. 2010
4. AI can make some games be different each time. How could that be good for players?
 - A. Players would not need to finish games.
 - B. Players would be more likely to win without trying.
 - C. Players would be less likely to get bored.



5. What does **compete** mean in the *Exploring Online Gaming* book?

*Gamers can work together on teams. Or they can **compete** against one another.*

- A. to play alone
- B. to try to help
- C. to try to win

6. What does **react** mean in the *Exploring Online Gaming* book?

*But AI characters can **react** to players. They say or do different things.*

- A. to always do the same thing
- B. to change based on what happens
- C. to take place outside of a game



ANSWER KEY FOR HOT TECH: EXPLORING ONLINE GAMING

1. Answers will vary
2. Answers will vary
3. A
4. C
5. C
6. B



5. What does **explore** mean in the *Exploring Robots* book?

*Robots help people **explore** space. In 1997, a robot landed on Mars.*

- A. to go somewhere and learn about it
- B. to stay away from somewhere
- C. to change the name of a place

6. What does **products** mean in the *Exploring Robots* book?

*Factories often use robots. These robots make all kinds of **products**.*

- A. things that people fear
- B. things that people dislike
- C. things that people make and sell



ANSWER KEY FOR HOT TECH: EXPLORING ROBOTS

1. Answers will vary
2. Answers will vary
3. B
4. A
5. A
6. C



COMPREHENSION QUESTIONS

HOT TECH: EXPLORING SMARTPHONES

1. Write a few sentences describing the main ideas of Chapter 4.
2. Do you think smartphones are more helpful or harmful? Why?
3. When was the first smartphone released?
 - A. 1994
 - B. 2007
 - C. 2008
4. What is one way that recycling smartphones could be helpful?
 - A. Companies could mine for less new material.
 - B. Smartphones could stop using rare materials.
 - C. People could throw away more smartphones.



5. What does **route** mean in the *Exploring Smartphones* book?

*Next, they use a map app. They find a bus **route** to the restaurant.*

- A. a way to get somewhere
- B. a way to buy something
- C. a way to hide something

6. What does **suggest** mean in the *Exploring Smartphones* book?

*Each phone learns from its user. It can **suggest** words or apps that they use often.*

- A. to not know
- B. to offer
- C. to break off



ANSWER KEY FOR HOT TECH: EXPLORING SMARTPHONES

1. Answers will vary
2. Answers will vary
3. A
4. A
5. A
6. B



5. What does **features** mean in the *Exploring Smartwatches* book?

*By the early 2000s, smartwatches had gained more **features**. Some could make phones calls and receive messages.*

- A. things a device can do
- B. things that no one does
- C. things that cause problems

6. What does **data** mean in the *Exploring Smartwatches* book?

*Smartwatches collect many details about users. These details include **data** about people's health and location.*

- A. information
- B. prices
- C. lies



ANSWER KEY FOR HOT TECH: EXPLORING SMARTWATCHES

1. Answers will vary
2. Answers will vary
3. B
4. C
5. A
6. A



COMPREHENSION QUESTIONS

HOT TECH: EXPLORING VIRTUAL REALITY

1. Write a few sentences describing the main ideas of Chapter 2.
2. Do you think training in VR is as good as training in the real world? Why or why not?
3. How many screens do most VR headsets have?
 - A. one
 - B. two
 - C. three
4. Why didn't VR video games appear before the 1990s?
 - A. Computers did not exist before then.
 - B. Computers were not good enough before then.
 - C. Virtual reality did not exist before then.



5. What does **situations** mean in the *Exploring Virtual Reality* book?

*They get ready for common **situations**. For example, they may order food.*

- A. things that can happen
- B. things that cannot happen
- C. things that people break

6. What does **overcome** mean in the *Exploring Virtual Reality* book?

*VR could help people **overcome** fears. Viewing something in VR may feel less scary. So, people could get used to the thing they fear.*

- A. to run away from
- B. to get stuck in
- C. to get over



ANSWER KEY FOR HOT TECH: EXPLORING VIRTUAL REALITY

1. Answers will vary
2. Answers will vary
3. B
4. B
5. A
6. C