

### **EXTREME SCIENTISTS: ANTARCTIC SCIENTISTS**

| 1. Write a paragraph that expla          | ains the main ideas of Chapter 4.            |
|--|--|
|  |  |
| <b>2.</b> If you were a scientist in Ant | tarctica, what would you want to study? Why? |

- 3. Which explorer was the first to reach the South Pole?
  - A. Robert Falcon Scott
  - B. Roald Amundsen
  - C. Ernest Shackleton
- 4. Why might having few people around be hard on scientists' mental health?
  - **A.** The scientists might move too much.
  - **B.** The scientists might need more work.
  - **C.** The scientists might feel lonely.



**5.** What does **isolated** mean in the *Antarctic Scientists* book?

The station is cold and **isolated**. Planes and tractors bring supplies during the summer. But during the winter, no one can come or go.

- A. easy to reach
- **B.** hard to get to
- C. close to many cities
- 6. What does shields mean in the Antarctic Scientists book?

This material is waterproof. It **shields** them from cold water and snow.

- A. harms
- **B.** protects
- C. fills up



## **ANSWER KEY FOR EXTREME SCIENTISTS: ANTARCTIC SCIENTISTS**

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



#### **EXTREME SCIENTISTS: ASTRONAUTS**

| 1. | Write a | paragraph | n that ex | plains t | he main | ideas of | Chapter ! | 5. |
|----|---------|-----------|-----------|----------|---------|----------|-----------|----|
|    |         |           |           |          |         |          |           |    |

2. Would you want to become an astronaut? Why or why not?

- **3.** Who was the first person to go to space?
  - A. Neil Armstrong
  - B. Yuri Gagarin
  - C. Alan Shepard
- **4.** How would finding water on the moon help astronauts do longer missions there?
  - **A.** They wouldn't have to bring as much water from Earth.
  - **B.** They wouldn't have to bring any food from Earth.
  - C. They could send more water back to Earth.



#### **5.** What does **operate** mean in the *Astronauts* book?

Astronauts inside the ISS **operate** a crane. The crane moves a robotic arm.

- A. control
- **B.** close tightly
- C. hold still

### **6.** What does **specific** mean in the *Astronauts* book?

At this time, they get more **specific** training. They learn to use certain tools and vehicles.

- A. made very dangerous
- B. having many different uses
- C. focused on certain skills or goals



## **ANSWER KEY FOR EXTREME SCIENTISTS: ASTRONAUTS**

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



#### **EXTREME SCIENTISTS: CAVE RESEARCHERS**

| 4 | 1.1.1  | _                         | 1           |         |       |           | 1 1    |                |
|---|--------|---------------------------|-------------|---------|-------|-----------|--------|----------------|
| 1 | W/rite | a tew                     | SENTENCES   | about t | 10M S | chenticts | travel | inside caves.  |
|   | VVIILL | $a \cdot c \cdot v \cdot$ | 36116611663 | abouti  | 1000  | こしいいしょうしつ | uavci  | ilibiae eaves. |

2. Would you want to travel deep inside a cave? Why or why not?

- 3. How many different kinds of plants and animals live in US caves?
  - **A.** fewer than 50
  - **B.** about 800
  - **C.** more than 1,000
- **4.** Why would scientists want to learn how pollution spreads in and near caves?
  - A. so they can plan how to help it spread less
  - B. so they can plan how to spread it more
  - C. so they can go to new areas



5. What does eventually mean in the Cave Researchers book?

The cracks grow over time. They **eventually** become a cave.

- A. never
- B. at a later time
- **C.** right away
- 6. What does fragile mean in the Cave Researchers book?

Many cave ecosystems are **fragile**. Even small changes could hurt them.

- A. not possible to break or hurt
- B. easy to break or hurt
- C. very tiny



## **ANSWER KEY FOR EXTREME SCIENTISTS: CAVE RESEARCHERS**

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



### **EXTREME SCIENTISTS: FOREST CANOPY ECOLOGISTS**

| 1. | Write a | ı paragraph | that ex | plains t | ne main | ideas of | Chapter | ۷. |
|----|---------|-------------|---------|----------|---------|----------|---------|----|
|    |         |             |         |          |         |          |         |    |

2. Would you want to climb high into a forest canopy? Why or why not?

- 3. Which scientist climbed the world's tallest tree in 2006?
  - A. Bill Denison
  - B. Margaret Lowman
  - C. Stephen Sillett
- **4.** Why do people travel on foot to reach many canopies?
  - **A.** Most canopies are very close to cities.
  - **B.** Many trails to forests are too steep or remote for cars.
  - **C.** Most trails to forests are very short.



5. What does exclusively mean in the Forest Canopy Ecologists book?

Eighteen of those were species that lived **exclusively** in the canopy. Others lived on the ground.

- A. only
- B. also
- C. not at all
- **6.** What does **monitor** mean in the *Forest Canopy Ecologists* book?

Drones can **monitor** wildlife, too. They track where and how animals move.

- A. ignore or forget
- **B.** keep secret
- C. pay close attention to



## ANSWER KEY FOR EXTREME SCIENTISTS: FOREST CANOPY ECOLOGISTS

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



#### **EXTREME SCIENTISTS: MOUNTAIN RESEARCHERS**

| 1. | Write a | a few | sentences | describing | some | of the | ways | biologis | sts |
|----|---------|-------|-----------|------------|------|--------|------|----------|-----|
|    | study a | anima | als.      |            |      |        |      |          |     |

2. Which type of science would you most like to study? Why?

- 3. Which mountain has the highest point on Earth?
  - A. Mount Tupungato
  - **B.** Mount Everest
  - C. Mount Washington
- **4.** Why would tracking animal populations show which species are in danger?
  - A. Animals with falling numbers are more at risk.
  - **B.** Animals with rising numbers are more at risk.
  - C. Animals with high numbers are at risk.



5. What does recent mean in the Mountain Researchers book?

Some layers formed very long ago. Others are more **recent**.

- A. from very long ago
- **B.** not from very long ago
- C. from the future
- **6.** What does **observatory** mean in the *Mountain Researchers* book?

Mount Washington has an **observatory** at the top. Scientists go there to study the weather.

- A. a place where people read books
- B. a place where people study math
- C. a place where people study nature



## **ANSWER KEY FOR EXTREME SCIENTISTS: MOUNTAIN RESEARCHERS**

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



#### **EXTREME SCIENTISTS: VOLCANOLOGISTS**

|  | 1. | Write | a few | v sentences | describing | lava and | how: | scientists | study | / it. |
|--|----|-------|-------|-------------|------------|----------|------|------------|-------|-------|
|--|----|-------|-------|-------------|------------|----------|------|------------|-------|-------|

2. Would you want to become a volcanologist? Why or why not?

- 3. About how many active volcanoes are there in the world?
  - **A.** 50
  - **B.** 1,500
  - **C.** 4,000
- **4.** Why would first aid be important in remote places?
  - **A.** Many hospitals are nearby.
  - **B.** Help and hospitals can be far away.
  - C. People in remote places don't get hurt.



5. What does affects mean in the Volcanologists book?

The age of this lava **affects** how it flows. Older lava is sticky and slow. Newer lava is hotter. It flows quickly.

- A. blocks the way
- B. makes a difference
- C. stays the same
- **6.** What does **toxic** mean in the *Volcanologists* book?

**Toxic** gases were inside. Three of the skiers died from breathing in the gases.

- A. nice to smell
- **B.** hard to see
- C. deadly



## **ANSWER KEY FOR EXTREME SCIENTISTS: VOLCANOLOGISTS**

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