## Mercury

by Justin Moy



NASA Mercury

Before the 1970s, people didn't know much about the planet Mercury. They knew that Mercury was the smallest planet in our solar system and the closest to the sun. They also knew that the planet orbited the sun in only 88 Earth days, faster than any other planet in our solar system.

In the 1970s, scientists sent a space probe to fly by Mercury and take photographs of the planet. The probe wasn't able to take photos of the entire planet, but scientists were able to learn more than they ever had.

A second probe, called MESSENGER, was launched in 2004. For a few years it collected a lot of data on Mercury. Now, scientists know much more about Mercury.

## ReadWorks®

Mercury

Mercury is only a little bigger than Earth's moon. In fact, Mercury's surface even has craters like Earth's moon. Comets and meteoroids have hit the planet, leaving dents or pits on its surface. These are called impact craters.

There are also some differences between Mercury and Earth's moon. One major difference is that Mercury's surface has curved cliffs. Earth's moon doesn't have them. Astronomers think these cliffs are a sign that the planet has actually shrunk over time.

A lot of the facts scientists know about Mercury are from the space probes sent there. However, no one has ever been sent to the planet. It is so close to the sun that it would be dangerous for anyone to go there. Maybe one-day astronauts would be able to travel to the planet and study it.

## Name:

Date:

1. Which is the smallest planet in our solar system?

- A. Earth
- B. Mercury
- C. Venus
- D. Mars

2. What two things does the author compare in this text?

- A. the planet Mercury and Earth's moon
- B. the first and second probes sent to Mercury
- C. how Mercury and Earth formed
- D. the sizes of Earth and Earth's moon
- 3. Read these sentences from the text.

In the 1970s, scientists sent a space probe to fly by Mercury and take photographs of the planet. The probe wasn't able to take photos of the entire planet, but scientists were able to learn more than they ever had.

A second probe, called MESSENGER, was launched in 2004. For a few years it collected a lot of data on Mercury. Now, scientists know much more about Mercury.

What conclusion can be drawn about space probes and Mercury based on this evidence?

A. Scientists do not need to send any more space probes to Mercury.

B. Scientists did not know anything about Mercury before sending space probes there.

C. The first space probe scientists sent to Mercury was better than the second space probe.

D. Space probes have been very helpful in helping scientists learn more about Mercury.

4. Based on the text, why have no humans been sent to Mercury?

A. because humans do not want to learn about Mercury

B. because scientists know enough about Mercury that they do not need to send humans there

C. because it is so far away that it would be difficult to send anyone there

D. because it is so close to the sun that it would be dangerous for anyone to go there

5. What is the main idea of this text?

**ReadWorks**<sup>®</sup>

A. Scientists have learned a lot about the planet Mercury because of the space probes sent there.

B. The planet Mercury and Earth's moon are alike and different in many ways.

C. Mercury is the closest planet to the sun, and it orbits the sun faster than any other planet.

D. In 2004, scientists sent a space probe called MESSENGER to Mercury to collect data on the planet.

6. Read these sentences from the text:

"For a few years [the space probe] collected a lot of data on Mercury. Now, scientists know much more about Mercury."

Based on the text, what does the word "data" mean?

- A. teaching
- B. speed
- C. information
- D. planet

## **ReadWorks**°

7. Choose the answer that best completes the sentence.

No one has ever been sent to Mercury \_\_\_\_\_\_ it is so close to the sun that it would be dangerous for anyone to go there.

- A. because
- B. although
- C. therefore
- D. while

8. In the 1970s, what did scientists send to fly by Mercury and take photographs?

**9.** Give one example of something scientists have learned about Mercury since sending space probes there.

Support your answer with evidence from the text.

10. In general, why might scientists need to use space probes?

Support your answer with evidence from the text.