Chapter 25 The Solar System

# Section 25.3 The Inner Solar System (pages 803–809)

This section describes the terrestrial planets found in the inner solar system.

# Reading Strategy (page 803)

**Summarizing** Copy the table on a separate sheet of paper. Write all the headings for the section in the table. Write a brief summary of the text for each heading. For more information on this Reading Strategy, see the **Reading and Study Skills** in the **Skills and Reference Handbook** at the end of your textbook.

#### **The Terrestrial Planets**

- I. The Terrestrial Planets
  - Four planets closest to the sun
  - Small, dense, with rocky surfaces
- II.
  - a.
- III. Venus

b. Thick atmosphere, very hot surface, many volcanoes

### The Terrestrial Planets (pages 803-804)

**1.** Identify the four terrestrial planets.



- **2.** Circle the letter of each sentence that is true about the terrestrial planets.
  - a. They all are relatively small and dense.
  - b. They all have rocky surfaces.
  - c. They all have thick atmospheres.
  - d. They all have a crust, mantle, and iron core.

### Mercury (pages 804-805)

3. Circle the letter of each sentence that is true about Mercury.

- a. It is the closest planet to the sun.
- b. It is the smallest of the terrestrial planets.
- c. It is geologically dead.
- d. It is the slowest-moving planet.
- **4.** Is the following sentence true or false? Mercury has a large number of craters, suggesting that the surface has been largely unchanged for billions of years. \_\_\_\_\_

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#### Chapter 25 The Solar System

### Venus (page 805)

- **5.** Circle the letter of each sentence that is true about Venus.
  - a. It rotates in the direction opposite to which it revolves.
  - b. It is the brightest object in Earth's night sky besides the moon.
  - c. It rotates once every 24 hours.
  - d. Its rotation rate is very fast.
- 6. Describe the effect that carbon dioxide in Venus's atmosphere has on its temperature.

## Earth (pages 805-806)

- 7. Circle the letter of each sentence that is true about Earth.
  - a. Its atmosphere is very thin and composed mostly of carbon dioxide.
  - b. It supports millions of different species of living things.
  - c. It has a suitable atmosphere and temperature for liquid water to exist.
  - d. Its core has cooled down to the point where it is geologically dead.
- 8. Why does Earth's surface continue to change? \_\_\_\_\_

### Mars (pages 807-808)

**9.** Circle the letter of each sentence that is true about Mars.

- a. The largest volcano in the solar system is on Mars.
- b. Iron-rich rocks on Mars's surface give it a reddish color.
- c. It has a thick atmosphere that keeps the planet warm.
- d. The surface of Mars is colder than Earth's surface.
- **10.** Is the following sentence true or false? Mars shows evidence of once having liquid surface water. \_\_\_\_\_

# Asteroids (page 809)

- 11. Small, rocky bodies in space are called \_\_\_\_\_\_.
- **12.** Circle the letter of each sentence that is true about asteroids.
  - a. Most small asteroids have irregular forms.
  - b. The asteroid belt formed when a giant planet was shattered by a collision with a meteoroid.
  - c. Most asteroids are found in the asteroid belt between Earth and Mars.
  - d. Most asteroids are less than 1 kilometer in diameter.
- **13.** What do scientists hypothesize about how the asteroids formed? \_\_\_\_\_