

Chapter 23 Touring Our Solar System

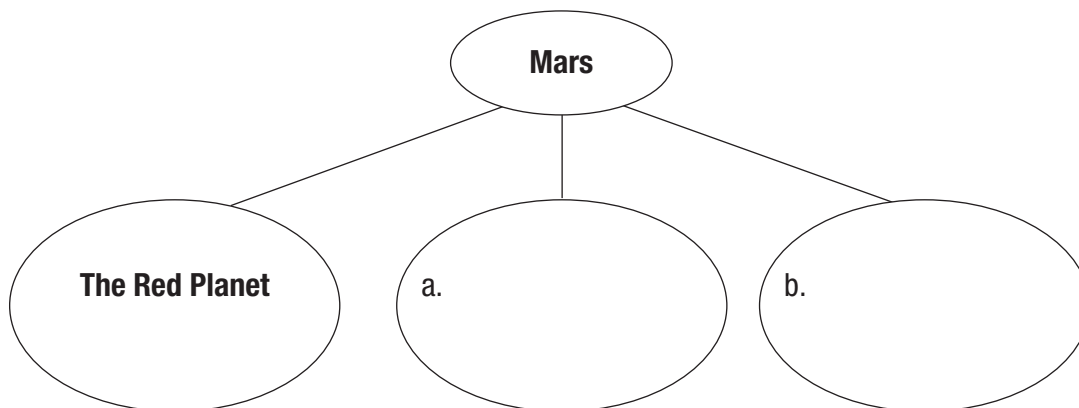
Section 23.2 The Terrestrial Planets

(pages 649–653)

This section describes the features of Mercury, Venus, and Mars.

Reading Strategy (page 649)

Using Prior Knowledge Before you read, add to the web diagram properties that you already know about Mars. Then add details about each property as you read. Make a similar web diagram for each of the other terrestrial planets. 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.



Mercury: The Innermost Planet (pages 649–650)

- Circle the letter of Mercury’s position in the solar system.
 - innermost terrestrial planet
 - innermost Jovian planet
 - outermost terrestrial planet
- Is the following sentence true or false? Like our moon, Mercury absorbs most of the sunlight that strikes it, has cratered highlands, and has vast smooth areas similar to maria. _____
- Mercury is a very _____ planet, because it contains a large iron core for its size.
- ☾ Mercury has the greatest _____ extremes of any planet.

Venus: The Veiled Planet (pages 650–651)

- Venus’s size, _____, mass, and location in the solar system are similar to Earth’s.
- Venus’s topography has been mapped from space and Earth, using _____ pulses. Circle the correct answer.
 radar light wave

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7. Is the following sentence true or false? Most of Venus’s surface consists of plains covered by lava flows. _____
8. 🌐 The surface of Venus was shaped by basaltic volcanism and _____ activity.

Mars: The Red Planet (pages 651–653)

9. Is the following sentence true or false? Mars’s atmosphere is 90 times the density of Earth’s. _____
10. Circle the letter of the gas that makes up most of the Martian atmosphere.
 - a. nitrogen b. oxygen c. carbon dioxide
11. Mars’s polar caps are made of _____ covered with a thin layer of frozen carbon dioxide.
12. Color changes on Mars’s surface observed from Earth may be caused by _____ in Mars’s atmosphere. Circle the correct answer.

cloud cover dust storms tornadoes
13. Is the following sentence true or false? The largest volcano on Mars is over $2\frac{1}{2}$ times higher than Mount Everest. _____
14. Select the appropriate letter in the figure that identifies each of the following Mars features.

- _____ Valles Marineris or canyon
- _____ Volcanoes

15. 🌐 One piece of evidence that there was once water on Mars is that some areas have drainage patterns similar to those made by _____ on Earth.
16. Is the following sentence true or false? The finding of evidence of liquid water on Mars is important because water is essential for life.

