

**CHAPTER REVIEW****Chapter 19****The Solar System****I. Vocabulary Review**

*If the underscored word or phrase makes the sentence true, write "TRUE" in the space provided. If the underscored word or phrase makes the sentence false, write the correct term or phrase in the space provided.*

- \_\_\_\_\_ 1. Both Jupiter and Saturn can be classified as terrestrial planets.
- \_\_\_\_\_ 2. A meteoroid is a large chunk of rock, ice, dust, and frozen gases in orbit around the sun.
- \_\_\_\_\_ 3. A body of matter that travels around a star in a fixed path is called a planet.
- \_\_\_\_\_ 4. Both Mars and Venus can be classified as gaseous giant planets.
- \_\_\_\_\_ 5. The sun, the planets, and many smaller objects make up what is called the solar system.
- \_\_\_\_\_ 6. Planets travel in circular orbits around the sun.
- \_\_\_\_\_ 7. Carbon dioxide in the atmosphere contributes to the greenhouse effect on Venus.
- \_\_\_\_\_ 8. Comets originate in the asteroid belt.
- \_\_\_\_\_ 9. Most asteroids can be found in the solar system between Mars and Jupiter.

**II. Concept Review**

*In the blank at the left, write the letter of the choice that best completes the statement or answers the question.*

- \_\_\_\_\_ 10. Of all the objects in the solar system, the largest is \_\_\_\_\_.  
**a.** Saturn                    **b.** Halley's comet    **c.** the sun                    **d.** Jupiter
- \_\_\_\_\_ 11. The terrestrial planets are so named because \_\_\_\_\_.  
**a.** they are similar to Earth in size and composition  
**b.** once they all traveled the same orbital path  
**c.** their atmospheres and gravitational fields are similar to Earth's  
**d.** their cores broke away from Earth's core 5 billion years ago
- \_\_\_\_\_ 12. The greenhouse effect on Venus is due primarily to \_\_\_\_\_.  
**a.** holes in Venus's ozone layer                    **c.** Venus's position relative to the sun  
**b.** sulfuric acid in Venus's clouds                    **d.** the composition of Venus's atmosphere
- \_\_\_\_\_ 13. The sun and the planets originated \_\_\_\_\_.  
**a.** in the Oort cloud, which was disturbed by the gravity of a passing star  
**b.** when the material in a rotating cloud of gas and dust condensed  
**c.** when the Big Bang sent a shock wave through the asteroid belt  
**d.** through a process known as the greenhouse effect

### Chapter Review 19 (continued)

- \_\_\_\_\_ **14.** Scientists infer from the asteroid belt’s position near Jupiter that \_\_\_\_\_.
- a.** Jupiter captured its gases from the largest asteroids billions of years ago
  - b.** the asteroids probably originated in the massive storm on Jupiter called the Great Red Spot
  - c.** most asteroids are the result of an explosion of Jupiter’s largest moon
  - d.** the asteroids would likely have condensed into a planet had it not been for Jupiter’s strong gravity
- \_\_\_\_\_ **15.** Pluto is not classified as a terrestrial planet because \_\_\_\_\_.
- a.** Pluto’s moon is too large
  - b.** it is too far from Earth
  - c.** its atmosphere is too similar to that of the gaseous giants
  - d.** it is composed of rock and ice

### III. Skills/Process Review

Use the table to answer the following questions.

Planet	Average distance from sun (million kilometers)	Revolution time (Earth days)	Moons	Diameter (kilometers)	Major components in atmosphere
Earth	150	365	1	12 756	Oxygen, nitrogen
Venus	108	225	0	12 104	Carbon dioxide

- 16.** What similarity between Earth and Venus might explain why they are sometimes called “twins”?  
\_\_\_\_\_
- 17.** Which planet revolves around the sun faster? \_\_\_\_\_
- 18.** Which characteristic of Venus might account for the greenhouse effect on that planet? \_\_\_\_\_  
\_\_\_\_\_
- 19.** Why doesn’t Earth experience the same degree of greenhouse effect as Venus? \_\_\_\_\_  
\_\_\_\_\_

### IV. EYV Review

- 20. Science and Society: Will Humans or Robots Explore Mars?** Virtual reality provides a way for a scientist who remains on Earth to experience a probe’s visit to outer space. Is this exploration as effective as sending someone into outer space? \_\_\_\_\_  
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