The Solar System

Multiple Choice

Write the letter of the correct answer on the line at the left.

____ **1.** The scientist who first used a telescope to support the heliocentric model was
- **a.** Galileo.
- **b.** Ptolemy.
- **c.** Kepler.

____ **2.** What process provides the sun with energy?
- **a.** solar winds
- **b.** nuclear fusion
- **c.** greenhouse effect

____ **3.** What are loops of gas on the sun that link different parts of sunspot regions together?
- **a.** solar flares
- **b.** solar winds
- **c.** prominences

____ **4.** Which planet is the smallest terrestrial planet?
- **a.** Mercury
- **b.** Earth
- **c.** Mars

____ **5.** The "red planet" is
- **a.** Venus.
- **b.** Uranus.
- **c.** Mars.

____ **6.** The planet with the most spectacular rings of any planet is
- **a.** Neptune.
- **b.** Saturn.
- **c.** Jupiter.

____ **7.** The inner planets all have
- **a.** a set of rings.
- **b.** many moons.
- **c.** rocky surfaces.

____ **8.** A loose collection of ice, dust, and small rocky particles that orbits the sun is a(an)
- **a.** asteroid.
- **b.** meteoroid.
- **c.** comet.

____ **9.** What is between the orbits of Mars and Jupiter?
- **a.** Kuiper belt
- **b.** asteroid belt
- **c.** Oort cloud

____ **10.** A flash of light in the night sky is a(an)
- **a.** meteor.
- **b.** asteroid.
- **c.** meteorite.

Completion

Read each word in the box. In each sentence below, fill in the correct word or words. Not all words will be used.

meteorite	sunspots	terrestrial	ring	ellipse	meteor

11. A(an) _____ is an oval shape.

12. Areas of gas on the sun that are cooler than the gases around them are called _____.

13. The inner planets are often called the _____ planets.

14. A thin disk of small particles of ice and rock around a planet is a(an) _____.

15. A meteoroid that passes through the atmosphere and hits Earth's surface is a(an) _____.

True or False

If a statement is true, write true. *If it is false, write* false.

_____ **16.** A heliocentric model of the solar system is sun-centered.

_____ **17.** An astronomical unit is the average distance between Earth and the moon.

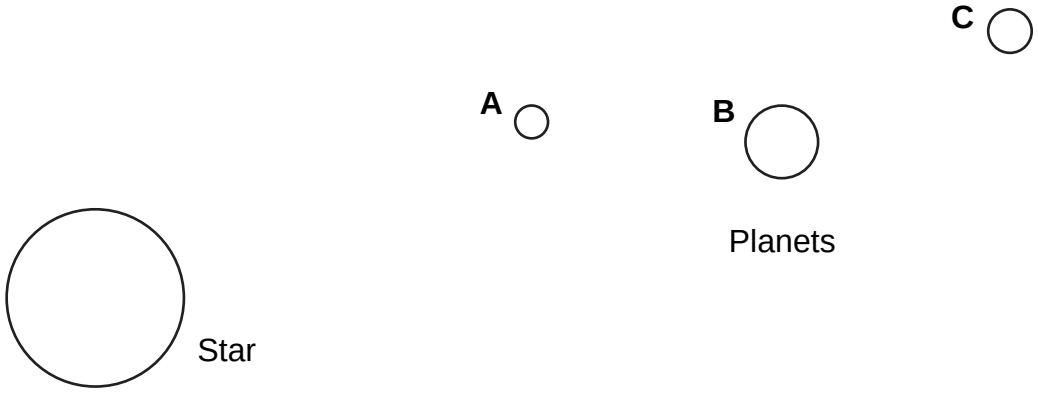
_____ **18.** The four outer planets are often called gas giants.

_____ **19.** A comet is a rocky object in the solar system that is too small to be a planet.

_____ **20.** Life other than that on Earth would be called extraterrestrial life.

Using Science Skills

The picture shows a star and three planets that are orbiting the star. Use the picture to answer questions 21, 22, and 23.



____ **21. Interpreting Diagrams** Which planet is closest to the star?

a. Planet A

b. Planet B

c. Planet C

____ **22. Inferring** Which planet will take the longest time to revolve around the star?

a. Planet A

b. Planet B

c. Planet C

____ **23. Applying Concepts** Suppose the star is our sun and Planet B is Earth. In a heliocentric system, which would be true?

a. Planet B would revolve around Planet C.

b. The star would revolve around Planet B.

c. Planet B would revolve around the star.

Using Science Skills

The table below shows three characteristics of Jupiter's four largest moons. Use the table to answer questions 24 and 25.

Jupiter's Largest Moons			
Moon	**Diameter (km)**	**Average Distance from Jupiter (km)**	**Length of Revolution Around Jupiter (Earth days)**
Io	3,642	421,600	1.8
Europa	3,120	670,900	3.5
Ganymede	5,268	1,070,000	7.2
Callisto	4,800	1,883,000	16.7

____ **24. Interpreting Tables** Which of the four large moons of Jupiter is the largest?

a. Europa

b. Ganymede

c. Callisto

____ **25. Inferring** Why does Callisto take the longest to revolve around Jupiter?

a. Callisto has the greatest diameter of the four moons.

b. Callisto is the closest of the four moons to Jupiter.

c. Callisto is the farthest of the four moons away from Jupiter.