

Ch-28 Practice Test

True/False

Indicate whether the statement is true or false.

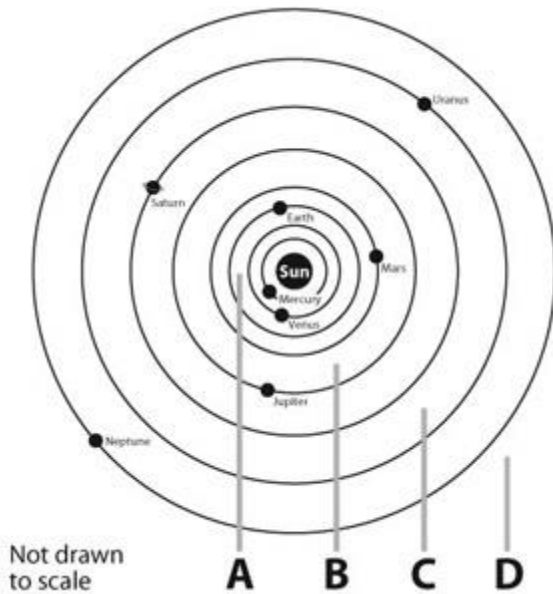
- ___ 1. Saturn's density is so low that the entire planet could float in water.
- ___ 2. Venus experiences an intense greenhouse effect.
- ___ 3. Galileo discovered that the orbits in which planets move around the Sun are elliptical.
- ___ 4. The surface of Mars has long channels that may have been caused by flowing water.
- ___ 5. A "shooting star," or meteor, is actually a meteoroid that burns up in Earth's atmosphere.
- ___ 6. The Oort cloud is a large collection of comets that surrounds the solar system.
- ___ 7. The outer planets are small, rocky planets with iron cores.
- ___ 8. Interstellar clouds are primarily composed of nitrogen and oxygen.
- ___ 9. Mercury's days and years are more similar in length than Earth's days and years.
- ___ 10. Only one of the eight planets in the solar system has all three forms of water on its surface.
- ___ 11. The inner planets have greater densities than the outer planets.

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- ___ 12. Methane absorbs the red and yellow light on ____, while the clouds of these planets reflect the green and blue light.
 - a. Venus and Earth
 - b. Uranus and Neptune
 - c. Saturn and Jupiter
 - d. Neptune and Venus
- ___ 13. ____ has colorful clouds in bands of white, red, tan, and brown.
 - a. Saturn
 - b. Uranus
 - c. Jupiter
 - d. Neptune
- ___ 14. One of ____ moons is larger than the planets Pluto and Mercury.
 - a. Neptune's
 - b. Pluto's
 - c. Uranus's
 - d. Saturn's
- ___ 15. Most of the frozen ice in a comet's ____ vaporizes after the comet's many trips around the Sun.
 - a. coma
 - b. tail
 - c. heart
 - d. nucleus
- ___ 16. Vaporized gases and released dust form a bright cloud called a(n) ____ around the solid part of a comet.
 - a. coma
 - b. tail
 - c. heart
 - d. nucleus

- b. core
d. nucleus
- ___ 17. Small pieces of rock that enter Earth's atmosphere at speeds of 15 to 70 km/s and burn up are called ____.
- a. stars
b. meteors
c. meteorites
d. asteroids
- ___ 18. A comet develops a coma because of ____.
- a. gravity
b. Earth's atmosphere
c. the Oort Cloud
d. heat from the Sun
- ___ 19. A comet develops a tail because of ____.
- a. the solar wind
b. Earth's atmosphere
c. the Oort Cloud
d. Jupiter's gravitational pull
- ___ 20. Scientists hypothesize that the Sun formed ____.
- a. less than a billion years ago
b. from a cloud of gas and dust
c. less than a million years ago
d. from a chunk of Jupiter
- ___ 21. Evidence suggests that ____ originate in the Oort Cloud located beyond the orbit of Pluto.
- a. comets
b. asteroids
c. meteoroids
d. meteorites
- ___ 22. Solar energy trapped by gases in Venus's atmosphere causes ____.
- a. clouds to form
b. its slow rotation
c. the greenhouse effect
d. a cooling effect
- ___ 23. The Sun was formed when energy caused by ____ in the center of the cloud of gas and dust radiated into space.
- a. nuclear fusion
b. evaporation
c. gravity
d. none of the above
- ___ 24. People once believed that all planets and stars orbited around ____.
- a. Mercury
b. Venus
c. Earth
d. Mars
- ___ 25. Galileo used his telescope to discover evidence for the Sun-centered model of the solar system. This evidence included all of the following EXCEPT ____.
- a. Venus going through phases
b. Venus revolving around the Sun, not Earth
c. the discovery of Neptune and Pluto
d. both a and b
- ___ 26. Mercury is the ____ planet from the Sun.
- a. fourth
b. third
c. second
d. first
- ___ 27. Which correctly identifies the location of the asteroid belt?



- | | |
|------|------|
| a. A | c. C |
| b. B | d. D |

- ___ 28. Bodies of interplanetary debris that orbit the Sun with most in the area between Mars and Jupiter are called ____.
- | | |
|------------|---------------|
| a. meteors | c. asteroids |
| b. comets | d. meteorites |
- ___ 29. Small, icy bodies that have highly eccentric orbits and can be found in the Oort cloud or the Kuiper belt are called ____.
- | | |
|------------|---------------|
| a. meteors | c. asteroids |
| b. comets | d. meteorites |
- ___ 30. Interplanetary material that enters the Earth's atmosphere and collides with the ground rather than burning up is called a(n) ____.
- | | |
|-----------|--------------|
| a. meteor | c. asteroid |
| b. comet | d. meteorite |
- ___ 31. What two gas giants appear blue because of the methane in their atmosphere?
- | | |
|-----------------------|------------------------|
| a. Jupiter and Saturn | c. Neptune and Uranus |
| b. Saturn and Uranus | d. Jupiter and Neptune |

Modified True/False

Indicate whether the statement is true or false. If false, change the identified word or phrase to make the statement true.

- ___ 32. Mars is the planet most similar to Earth in physical properties, such as diameter, mass, and density.

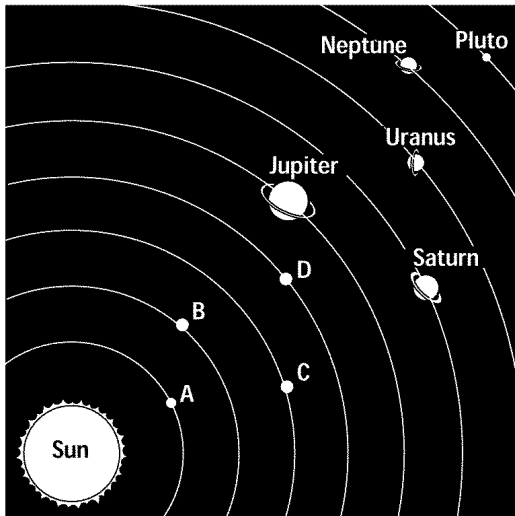
- ___ 33. Kepler's first law demonstrates that each planet has an elliptical orbit of unique size and shape with the Sun at one focus. _____

- ___ 34. Galileo's discovery of Jupiter's moons proved that not all celestial bodies orbit Earth; therefore, Earth is not necessarily the center of the solar system. _____
- ___ 35. The high concentration of carbon dioxide (CO₂) in the atmosphere of Mars inhibits infrared radiation from escaping and keeps the surface extremely hot. _____
- ___ 36. Asteroids are thought to be leftover planetesimals that never formed planets from the time of the solar system's formation. _____
- ___ 37. The Oort cloud and the Kuiper belt are asteroid belts. _____

Completion

Complete each statement.

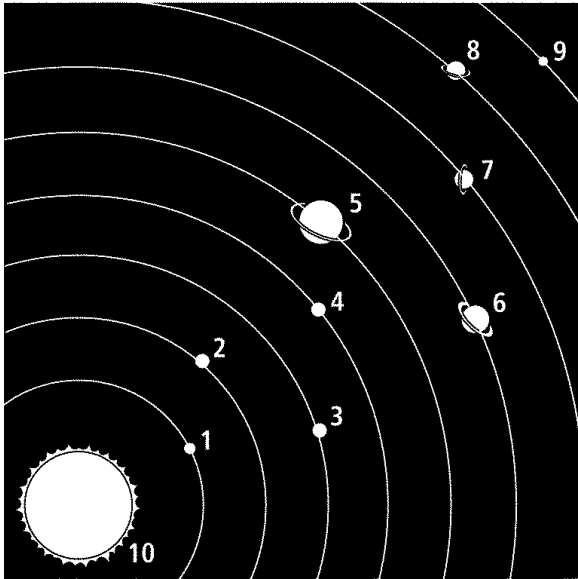
38. In the diagram below, the four terrestrial planets in order from the closest to the farthest from the Sun are A _____, B _____, C _____, and D _____.



39. The terrestrial planets are close to the size of Earth and have _____ surfaces, while the gas giant planets are larger, more gaseous, and _____.
40. The gas giants are composed primarily of lightweight elements, such as _____.

Label the diagram of our solar system by writing the name of each body next to its number. Note that the diagram is not to scale.

The Solar System



41. Number 1 on the diagram above is _____.
42. Number 2 on the diagram above is _____.
43. Number 3 on the diagram above is _____.
44. Number 4 on the diagram above is _____.
45. Number 5 on the diagram above is _____.
46. Number 6 on the diagram above is _____.
47. Number 7 on the diagram above is _____.
48. Number 8 on the diagram above is _____.
49. Number 9 on the diagram above is _____.
50. Number 10 on the diagram above is _____.

**Ch-28 Practice Test
Answer Section**

TRUE/FALSE

1. T
2. T
3. F
4. T
5. T
6. T
7. F
8. F
9. T
10. T
11. T

MULTIPLE CHOICE

12. B
13. C
14. D
15. D
16. A
17. B
18. D
19. A
20. B
21. A
22. C
23. A
24. C
25. C
26. D
27. B
28. C
29. B
30. D
31. C

MODIFIED TRUE/FALSE

32. F, Venus
33. T
34. T

35. F, Venus
36. T
37. F, two clusters of comets

COMPLETION

38. Mercury, Venus, Earth, Mars
39. solid and rocky, lack solid surfaces
40. hydrogen
helium
carbon
nitrogen
oxygen
41. Mercury
42. Venus
43. Earth
44. Mars
45. Jupiter
46. Saturn
47. Uranus
48. Neptune
49. Pluto
50. Sun