

1. Which of the following orbits around the Sun?

- A. Planets
 - B. Comets
 - C. Asteroids
 - D. All of the above
-

2. As a nebula shrinks under the influence of gravity, it

- A. spins slower
 - B. spins faster
 - C. loses its spin
 - D. spins into a protosun
-

3. Strictly speaking, in every second that passes, the mass of the Sun

- A. decreases
 - B. remains constant
 - C. increases
 - D. reinvents itself
-

4. Which planet is more dense than water?

- A. Mars
 - B. Venus
 - C. Neptune
 - D. All of the above
-

5. During the time of a new Moon, the

- A. Sun is between Earth and the Moon
 - B. Moon is between the Sun and Earth
 - C. Earth is between the Sun and the Moon
 - D. None of the above
-

6. During the time of a full Moon, the

- A. Sun is between Earth and the Moon
 - B. Moon is between the Sun and Earth
 - C. Earth is between the Sun and the Moon
 - D. None of the above
-

7. Asteroids are small rocky bodies that

- A. orbit the Sun
 - B. mainly reside between Mars and Jupiter
 - C. are smaller than Earth's Moon
 - D. All of the above
-

8. The tails of comets point in a direction

- A. toward the Sun
 - B. away from the Sun
 - C. at nearly right angles to the Sun
 - D. None of the above
-

9. Which of these makes contact with Earth's surface?

- A. Meteor
 - B. Meteorite
 - C. Meteoroid
 - D. None of the above
-

10. Knowing the names of the constellations tells us much about the

- A. stars that comprise them
 - B. people in the cultures that named them
 - C. difference between stars and planets
 - D. All of the above
-

11. Which of these stars radiates light of the longest wavelength?

- A. Red star
 - B. Yellow star
 - C. Blue star
 - D. Violet star
-

12. We measure the Sun's luminosity as (L_{Sun}).

If we were on a spaceship twice as far away from the Sun, its apparent brightness would appear

- A. the same
 - B. half as much
 - C. one quarter as much
 - D. four times as much
-

13. On the H–R diagram, the Sun is

- A. an average star
 - B. seen to be special
 - C. a low-temperature star
 - D. especially bright
-

14. A dying star that has collapsed to a small size and is cooling off would appear in which part of the H–R diagram?

- A. Lower left
 - B. Upper left
 - C. Lower right
 - D. Upper right
-

15. The source of energy in the Sun and stars is

- A. chemical reactions
 - B. thermonuclear reactions
 - C. Both of the above
 - D. None of the above
-

16. When a star collapses to one-tenth size, gravitation at its surface becomes

- A. one tenth as much
 - B. the same
 - C. 10 times as much
 - D. 100 times as much
-

17. When a giant star collapses to become a black hole, gravity is greatly increased

- A. at its surface
 - B. at its center
 - C. in all surrounding space
 - D. All of the above
-

18. If the Sun collapsed to become a black hole, the orbit of Earth would

- A. remain unchanged
 - B. be pulled inward toward the black hole
 - C. spiral outward away from the black hole
 - D. be a straight-line path
-

19. The motion of individual stars in a galaxy normally follow

- A. elliptical orbits around the center of the galaxy
 - B. completely random paths
 - C. straight lines for the most part
 - D. circular orbits around the center of the galaxy
-

20. If the distance between your eye and a lamp is halved,

- A. the light will appear to be two times brighter
 - B. the light will appear to be two times dimmer
 - C. the light will appear to be four times brighter
 - D. the light will appear to be eight times dimmer
-

21. How will the spectrum of a star moving toward us change?

- A. The wavelength will be stretched (redshift)
 - B. The wavelength will be compressed (blueshift)
-

22. Hubble's law has to do with the

- A. expansion of the universe
 - B. steady state of the universe
 - C. contraction of the universe
 - D. cosmic background radiation
-

23. Scientific evidence supports the date of the Big Bang event at

- A. 7,000 years ago
 - B. 100,000 years ago
 - C. 5 billion years ago
 - D. 13.7 billion years ago
-

24. Which scenario do you think is more likely?

- A. Heat Death
 - B. The Big Rip
 - C. Other
 - D. We really don't know
-

Answer Key

1. D
2. B
3. A
4. D
5. B
6. C
7. D
8. B
9. B
10. B
11. A
12. C
13. A
14. A
15. B
16. D
17. A
18. A
19. A
20. C
21. B
22. A
23. D
24. D