

Starry Starry Night Test -- 2021

1. The seventh planet from the Sun is:
 - A. Saturn
 - B. Uranus
 - C. Neptune
 - D. Jupiter

2. The universe is:
 - A. Contracting
 - B. Disintegrating
 - C. Expanding
 - D. Inflating

3. Which of the following planets have rings:
 - A. Jupiter
 - B. Saturn
 - C. Uranus
 - D. Neptune
 - E. All of the above

4. The difference between a planet and a dwarf planet is that a dwarf planet:
 - A. revolves around the Sun in an elliptical orbit
 - B. is smaller than a planet
 - C. has not cleared out the other objects in its orbit
 - D. is not perfectly round

5. Vesta is:
 - A. a dwarf planet
 - B. a near-Earth asteroid
 - C. an asteroid
 - D. a comet

6. True or False: The farthest point away from the Sun in a planet's orbit is called perihelion.
 - A. True
 - B. False

7. The visible surface of the Sun is called its:
- A. photosphere
 - B. corona
 - C. core
 - D. chromosphere
8. True or False: Neptune was discovered not with telescopes but by the use of mathematics.
- A. True
 - B. False
9. True or False: Planets revolve around their axes.
- A. True
 - B. False
10. Which planet's day is longer than its year?
- A. Earth
 - B. Uranus
 - C. Venus
 - D. Saturn
11. A meteoroid is:
- A. a small meteor orbiting the Earth
 - B. a small comet orbiting the Sun
 - C. a small piece of stony or metallic debris orbiting the Sun
 - D. a small asteroid orbiting the Earth
12. Which objects below orbit around their barycenter:
- A. Pluto and Charon
 - B. The Sun and the planets
 - C. Earth and the Moon
 - D. All of the above
13. The age of the universe is:
- A. 4.6 million years
 - B. 4.6 billion years
 - C. 13.8 million years
 - D. 13.8 billion years

14. The fuzzy cloud of gas and dust around the center of a comet is its:
- A. tail
 - B. coma
 - C. nucleus
 - D. nebula
15. An exoplanet is:
- A. a planet without an atmosphere
 - B. a dwarf planet
 - C. a planet orbiting another star than the Sun
 - D. a planet orbiting the Sun beyond the Kuiper Belt
16. The planet that rotates the fastest is:
- A. Earth
 - B. Jupiter
 - C. Mercury
 - D. Neptune
17. What moon below has active volcanoes on it?
- A. Titan
 - B. Io
 - C. Charon
 - D. Europa
18. The Milky Way galaxy is a:
- A. lenticular galaxy
 - B. spiral galaxy
 - C. elliptical galaxy
 - D. irregular galaxy
19. The speed of light is:
- A. 186,000 miles per second
 - B. 186,000 miles per hour
 - C. 186,000 miles per year
 - D. 186,000 miles per astronomical unit

20. True or False: The four largest moons of Jupiter are Ganymede, Io, Europa and Titan.

- A. True
- B. False

21. True or False: Eclipses of the Sun and the Moon can only occur when the Moon crosses the ecliptic.

- A. True
- B. False

22. True or False: Eccentricity means the degree to which an orbit is shaped like an oval.

- A. True
- B. False

23. Auroras at the Earth's poles are caused by:

- A. solar radiation reflected from snow
- B. photons from the Sun shining through the atmosphere
- C. cloud to cloud lightening
- D. the solar wind interacting with atoms in the atmosphere

24. Identify the Moon phase below:



- A. Waxing Crescent
- B. Wanning Crescent
- C. First Quarter
- D. Third Quarter

25. Identify the Moon phase below:



- A. Waxing Crescent
- B. Waning Gibbous
- C. Third Quarter
- D. First Quarter

26. Name the alpha star in the constellation below:



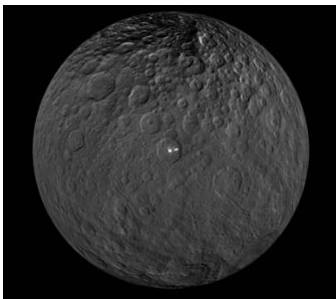
- A. Betelgeuse
- B. Sirius
- C. Aldebaran
- D. Vega

27. Name the alpha star in the constellation below:



- A. Antares
- B. Deneb
- C. Betelgeuse
- D. Arcturus

28. Identify the object below:



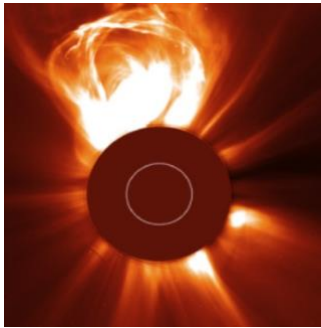
- A. Mercury
- B. The Moon
- C. Ceres
- D. Ganymede

29. Identify the object below:



- A. An eclipse of the Moon
- B. A crescent Moon
- C. A partial eclipse of the Sun
- D. An eclipse of the Sun

30. Identify the object below:



- A. A solar flare
- B. A solar prominence
- C. A coronal mass ejection
- D. A supernova

Tie breakers:

31. Trojans are:

- A. asteroids in the Kuiper Belt
- B. asteroids that share an orbit with a planet
- C. large asteroids in the asteroid belt
- D. asteroids that intersect Earth's orbit

32. The hottest planet is:

- A. Mercury
- B. Jupiter
- C. Venus
- D. Earth
- E. Mars

33. The Oort Cloud is:
- A. a nebula in the Orion constellation
 - B. a theoretical sphere of cometary bodies surrounding the Solar System
 - C. the halo of stars surrounding the Milky Way
 - D. a cloud of gas and dust at the center of the Milky Way
34. During an annular eclipse of the Sun, the Moon is at or near:
- A. apogee
 - B. aphelion
 - C. perigee
 - D. perihelion
 - E. none of the above
35. How many hours of daylight are there in Buenos Aires, Argentina on November 18?
- A. 8
 - B. 10
 - C. 12
 - D. 14
36. Which sequence below best describes the stages in the life cycle of an average star:
- A. average star, red giant, stellar nebula, planetary nebula, white dwarf
 - B. white dwarf, red giant, planetary nebula, stellar nebula, average star
 - C. stellar nebula, average star, red giant, planetary nebula, white dwarf
 - D. stellar nebula, planetary nebula, average star, red giant, white dwarf
37. If Jupiter is five astronomical units (AU's) from the Sun, how many miles is it from the Sun?
- A. 65,000,000
 - B. 400,000
 - C. 465,000,000
 - D. 465,000
 - E. none of the above
38. The differential rotation of the Sun means that:
- A. the Sun rotates faster than the Earth
 - B. the Sun rotates slower than it revolves
 - C. the Sun rotates faster at its equator than at its poles
 - D. the planets all rotate faster than the Sun

39. The order of the dwarf planets in the Kuiper Belt from the closest to the Sun to the farthest is:

- A. Pluto, Ceres, Makemake, Haumea, Eris
- B. Ceres, Pluto, Haumea, Makemake, Eris
- C. Eris, Pluto, Ceres, Makemake, Haumea
- D. Pluto, Haumea, Makemake, Ceres, Eris
- E. none of above

40. What planet is 1,000 degrees hotter on its daytime side than its nighttime side?

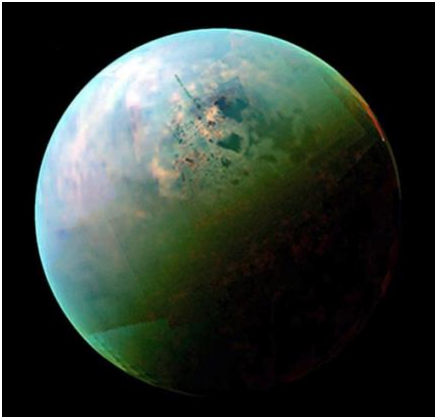
- A. Venus
- B. Jupiter
- C. Mercury
- D. Neptune

41. The object below is:



- A. M1
- B. a supernova remnant
- C. the Crab Nebula
- D. a cloud of dust and gas
- E. all of the above

42. The moon below orbits what planet?



- A. Mars
- B. Uranus
- C. Jupiter
- D. Saturn
- E. Venus

43. Emission nebulae glow primarily in what color?

- A. Yellow
- B. Red
- C. Blue
- D. Green

44. The axial tilt of the Earth is:

- A. zero degrees
- B. 22.3 degrees
- C. 23.5 degrees
- D. 25.6 degrees

45. Centaurs:

- A. are small Solar System bodies
- B. orbit the Sun within the orbits of the outer planets
- C. have the characteristics of both comets and asteroids
- D. A and C above
- E. A, B and C above

Starry Starry Night 2021 Test Answer Key

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|-------|----------------------|
| 1. B | 26. B |
| 2. C | 27. C |
| 3. E | 28. C |
| 4. C | 29. C |
| 5. C | 30. C |
| 6. B | |
| 7. A | Tie breakers: |
| 8. A | 31. B |
| 9. B | 32. C |
| 10. C | 33. B |
| 11. C | 34. A |
| 12. D | 35. D |
| 13. D | 36. C |
| 14. B | 37. C |
| 15. C | 38. C |
| 16. B | 39. E |
| 17. B | 40. C |
| 18. B | 41. E |
| 19. A | 42. D |
| 20. B | 43. B |
| 21. A | 44. C |
| 22. A | 45. E |
| 23. D | |
| 24. C | |
| 25. B | |