

# Cosmic Logical Reasoning

Astronomy · Practice Test · 25 Questions

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**1. If Mercury is the closest planet to the Sun, and Venus is the second, which planet is logically the third from the Sun?**

- A) Mars
- B) Earth
- C) Jupiter
- D) Saturn

**2. If a gas giant is defined as a planet composed mostly of hydrogen and helium, which of these is logically a gas giant?**

- A) Mars
- B) Venus
- C) Saturn
- D) Mercury

**3. If the inner planets are rocky and the outer planets are gaseous, which planet does not belong in the 'rocky' category?**

- A) Mars
- B) Venus
- C) Neptune
- D) Earth

**4. If a light-year is the distance light travels in one year, which of these is the closest star to the Sun?**

- A) Proxima Centauri
- B) Sirius
- C) Vega
- D) Betelgeuse

**5. If a planet must clear its orbit to be classified as a planet, why is Pluto classified as a dwarf planet?**

- A) It is too cold
- B) It has not cleared its neighborhood
- C) It is made of gas
- D) It has no moon

**6. If Earth rotates once every 24 hours, approximately how long does it take for the Moon to complete one rotation on its axis?**

- A) 24 hours
- B) 12 hours
- C) 27.3 days
- D) 365 days

**7. If all terrestrial planets have solid surfaces, which planet is NOT a terrestrial planet?**

- A) Mars
- B) Mercury
- C) Jupiter
- D) Venus

**8. If the asteroid belt is located between two planets, which are they?**

- A) Earth and Mars
- B) Mars and Jupiter
- C) Jupiter and Saturn
- D) Venus and Earth

**9. If Olympus Mons is the tallest volcano in the solar system, on which planet is it located?**

- A) Earth
- B) Venus
- C) Mars
- D) Mercury

**10. If Venus is the hottest planet in the solar system due to its atmosphere, what is the primary component of that atmosphere?**

- A) Oxygen
- B) Carbon Dioxide
- C) Nitrogen
- D) Hydrogen

**11. If moons are natural satellites, which planet has the largest moon in the solar system, Ganymede?**

- A) Saturn
- B) Jupiter
- C) Uranus
- D) Neptune

**12. If the Sun accounts for the vast majority of the solar system's mass, what percentage does it represent?**

- A) 50%
- B) 75%
- C) 99.8%
- D) 90%

**13. If Neptune is the most distant major planet, which planet is the second most distant?**

- A) Uranus
- B) Saturn
- C) Jupiter
- D) Mars

**14. If a planet's day is defined by its rotation, which planet has the longest day, taking 243 Earth days to rotate once?**

- A) Mercury
- B) Venus
- C) Mars
- D) Jupiter

**15. If Earth is the only planet known to support life, which chemical element is considered essential for 'life as we know it'?**

- A) Gold
- B) Carbon
- C) Iron
- D) Helium

**16. If ring systems are common among gas giants, which planet has the most extensive and visible ring system?**

- A) Jupiter
- B) Uranus
- C) Neptune
- D) Saturn

**17. If gravity keeps planets in orbit, what keeps the solar system rotating around the center of the Milky Way?**

- A) A massive black hole
- B) Dark matter
- C) A nearby star
- D) Magnetism

**18. If Phobos and Deimos are moons of a specific planet, which planet are they orbiting?**

- A) Jupiter
- B) Mars
- C) Saturn
- D) Uranus

**19. If the Great Red Spot is a persistent high-pressure storm, on which planet is it found?**

- A) Saturn
- B) Jupiter
- C) Neptune
- D) Venus

**20. If the temperature of the Sun's surface is about 5,500 degrees Celsius, what is the layer called?**

- A) Corona
- B) Photosphere
- C) Core
- D) Chromosphere

**21. If Earth's axis is tilted, what is the approximate degree of this tilt?**

- A) 15 degrees
- B) 23.5 degrees
- C) 45 degrees
- D) 90 degrees

**22. If Titan is a major moon with a thick atmosphere, which planet does it orbit?**

- A) Jupiter
- B) Saturn
- C) Uranus
- D) Neptune

**23. If ice giants are a subset of gas giants, which two planets are classified as ice giants?**

- A) Jupiter and Saturn
- B) Uranus and Neptune
- C) Mars and Earth
- D) Mercury and Venus

**24. If the Milky Way is a galaxy, what type of galaxy is it classified as?**

- A) Elliptical
- B) Irregular
- C) Spiral
- D) Lenticular

**25. If orbital periods increase with distance from the Sun, which planet takes the longest to orbit the Sun?**

- A) Jupiter
- B) Saturn
- C) Uranus
- D) Neptune