

Advanced Celestial Geography

Space And Astronomy · Answer Key · 15 Questions

1. Which planet possesses an axial tilt of approximately 98 degrees, causing it to roll along its orbital path like a ball?

- A) Uranus**
- B) Neptune
- C) Saturn
- D) Venus

2. What is the specific name for the region in space where the solar wind is stopped by the interstellar medium?

- A) Heliosheath
- B) Heliopause**
- C) Oort Cloud
- D) Kuiper Belt

3. Which moon in the solar system is the only one known to have a dense atmosphere and liquid methane lakes on its surface?

- A) Europa
- B) Ganymede
- C) Titan**
- D) Enceladus

4. The 'Great Red Spot' on Jupiter is a persistent high-pressure storm; what is its approximate lifespan based on historical observation?

- A) 50 years
- B) 150 years
- C) 350 years**
- D) 1000 years

5. What is the primary constituent of the thin atmosphere found on the planet Mercury?

- A) Carbon dioxide
- B) Oxygen
- C) Argon
- D) Exosphere of sodium and potassium**

6. Which celestial body has the longest orbital period in the solar system, taking roughly 248 Earth years to complete one revolution?

- A) Neptune
- B) Pluto**
- C) Eris
- D) Makemake

7. What is the Roche limit in celestial mechanics?

- A) The distance within which a celestial body held together only by its own gravity will disintegrate**
- B) The boundary of a black hole's event horizon
- C) The point where solar radiation pressure exceeds gravitational pull
- D) The maximum mass a white dwarf can reach

8. Which dwarf planet is located in the asteroid belt between Mars and Jupiter?

- A) Haumea
- B) Sedna
- C) Ceres**
- D) Quaoar

9. The 'Trojan asteroids' are objects that share an orbit with a planet by staying near which specific gravitational points?

- A) Lagrangian points**
- B) Perihelion points
- C) Escape velocity nodes
- D) Magnetic poles

10. Which planet has the highest density in the solar system?

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

11. What is the name of the hypothetical cloud of icy objects far beyond the Kuiper Belt, believed to be the source of long-period comets?

- A) The Asteroid Belt
- B) The Oort Cloud**
- C) The Scattering Disk
- D) The Hill Sphere

12. What is the approximate rotational period of Venus, which is slower than its orbital period?

A) 243 Earth days

B) 116 Earth days

C) 30 Earth days

D) 225 Earth days

13. Which giant planet's rings are primarily composed of water ice, with traces of rock and dust?

A) Jupiter

B) Uranus

C) Neptune

D) Saturn

14. What is the term for the line that separates the illuminated and dark hemispheres of a planet or moon?

A) The Equinox

B) The Terminator

C) The Solstice

D) The Meridian

15. Which moon of Jupiter is considered the most volcanically active body in the entire solar system?

A) Callisto

B) Io

C) Europa

D) Ganymede