

Challenging Solar System Facts

Solar System Basics · Practice Test · 18 Questions

1. Which planet is known to have a retrograde rotation, meaning it spins in the opposite direction to most other planets?

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

2. What is the primary component of the Sun, making up approximately 74% of its mass?

- A) Helium
- B) Oxygen
- C) Hydrogen
- D) Iron

3. The Kuiper Belt, a region beyond Neptune, is home to many icy bodies, including which dwarf planet that was once considered the ninth planet?

- A) Ceres
- B) Eris
- C) Makemake
- D) Pluto

4. Which of Jupiter's moons is the most volcanically active body in the solar system?

- A) Europa
- B) Ganymede
- C) Io
- D) Callisto

5. What is the name of the region beyond the orbit of Neptune that is a vast, disc-like structure containing numerous icy bodies?

- A) Oort Cloud
- B) Asteroid Belt
- C) Heliopause
- D) Kuiper Belt

6. What phenomenon causes the distinctive rings of Saturn?

- A) Solid ice formations
- B) Gravitational pull from moons
- C) Molten rock debris
- D) Frozen atmospheric gases

7. Which terrestrial planet has the highest average surface temperature in our solar system?

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

8. The Great Red Spot on Jupiter is a giant, persistent storm that has been observed for centuries. What is its approximate size relative to Earth?

- A) About the size of Earth
- B) Twice the diameter of Earth
- C) Half the diameter of Earth
- D) Three times the diameter of Earth

9. What is the most abundant gas in Earth's atmosphere, making up about 78%?

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

10. Which planet is known for its extreme axial tilt, causing it to orbit the Sun on its side?

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

11. What is the name of the only moon in our solar system known to have a substantial atmosphere?

- A) Europa
- B) Titan
- C) Io
- D) Ganymede

12. The asteroid belt is located between the orbits of which two planets?

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

13. What is the primary force that holds the planets in orbit around the Sun?

- A) Electromagnetism
- B) Nuclear fusion
- C) Gravity
- D) Centrifugal force

14. Which of the following is NOT a dwarf planet in our solar system?

- A) Ceres
- B) Eris
- C) Pluto
- D) Titan

15. What is the largest moon in the solar system, larger even than the planet Mercury?

- A) Titan
- B) Callisto
- C) Io
- D) Ganymede

16. What is the most prominent feature of Mars's surface, visible even from Earth?

- A) Vast oceans
- B) Giant impact craters
- C) Polar ice caps
- D) Extensive volcanic ranges

17. What is the approximate age of the solar system, in billions of years?

- A) 1
- B) 4.6
- C) 10
- D) 13.8

18. Which planet is known for its prominent, easily visible rings, composed mainly of ice particles?

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