

Astronomy Essentials for Teens

Astronomy · Answer Key · 20 Questions

1. Which planet in our solar system has the most extensive and visible ring system?

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

2. What is the primary gas that makes up the majority of the Sun's composition?

- A) Helium
- B) Oxygen
- C) Hydrogen**
- D) Nitrogen

3. Which galaxy is the nearest large spiral neighbor to the Milky Way?

- A) Andromeda**
- B) Triangulum
- C) Sombrero
- D) Whirlpool

4. What is the name of the boundary around a black hole from which nothing, not even light, can escape?

- A) Singularity
- B) Accretion Disk
- C) Event Horizon**
- D) Schwarzschild Radius

5. Which planet is known as the 'Red Planet' due to iron oxide on its surface?

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

6. What type of star is the Sun classified as?

- A) Red Giant
- B) White Dwarf
- C) Main-Sequence**
- D) Neutron Star

7. Which of these moons is the largest in the solar system?

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

8. The 'Great Red Spot' is a long-lived storm system located on which planet?

- A) Saturn
- B) Neptune
- C) Jupiter**
- D) Mars

9. What is the unit of measurement used to describe the distance light travels in one year?

- A) Astronomical Unit
- B) Parsec
- C) Light-year**
- D) Kilometer

10. Which phase of the Moon occurs when the Moon is positioned between the Earth and the Sun?

- A) Full Moon
- B) New Moon**
- C) First Quarter
- D) Last Quarter

11. What are the remnants of a supernova explosion that are extremely dense and rotate rapidly?

- A) Pulsars**
- B) Brown Dwarfs
- C) Red Supergiants
- D) Planetary Nebulae

12. Which planet has the longest orbital period around the Sun?

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

13. What is the hottest planet in our solar system?

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

14. Between which two planets is the main asteroid belt located?

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

15. What is the process called that powers stars by combining hydrogen nuclei to form helium?

- A) Nuclear Fission
- B) Nuclear Fusion**
- C) Radioactive Decay
- D) Combustion

16. Which dwarf planet was reclassified from a planet to its current status in 2006?

- A) Eris
- B) Ceres
- C) Pluto**
- D) Haumea

17. What is the term for a group of stars that form a recognizable pattern as seen from Earth?

- A) Galaxy
- B) Nebula
- C) Constellation**
- D) Cluster

18. Which layer of the Sun is the visible surface that we see from Earth?

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

19. What force is primarily responsible for the formation of stars and galaxies?

- A) Electromagnetism
- B) Gravity**
- C) Weak Nuclear Force
- D) Strong Nuclear Force

20. Which planet rotates on its side, with its axis of rotation tilted nearly 98 degrees?

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