

Middle School Astrophysics Quiz

Astrophysics · Answer Key · 25 Questions

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

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

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

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

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

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

4. What is the term for the path an object takes as it revolves around another object in space?

- A) Axis
- B) Orbit**
- C) Rotation
- D) Trajectory

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

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

6. What is the name of the force that pulls objects toward the center of a planet or star?

- A) Magnetism
- B) Gravity**
- C) Inertia
- D) Friction

7. How long does it take for light from the Sun to reach Earth?

- A) 8 minutes**
- B) 1 hour
- C) 24 hours
- D) 30 seconds

8. What type of celestial object is at the center of our solar system?

- A) Black Hole
- B) Neutron Star
- C) Main Sequence Star**
- D) Red Giant

9. Which planet has the longest 'year' (time to orbit the Sun)?

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

10. What is the largest planet in our solar system?

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

11. Between which two planets is the main Asteroid Belt located?

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

12. Which celestial body is classified as a 'dwarf planet'?

- A) Pluto**
- B) Mercury
- C) Titan
- D) Ganymede

13. What do astronomers call a massive explosion that occurs at the end of a high-mass star's life cycle?

- A) Supernova**
- B) Nebula
- C) Pulsar
- D) Quasar

14. What is the name of the region of space where gravity is so strong that not even light can escape?

A) Event Horizon

B) Black Hole

C) Singularity

D) White Dwarf

15. Which planet rotates on its side, with an axial tilt of nearly 98 degrees?

A) Neptune

B) Uranus

C) Saturn

D) Venus

16. What is the phase of the Moon when it is completely invisible from Earth?

A) Full Moon

B) First Quarter

C) New Moon

D) Waxing Crescent

17. Which planet has the highest surface temperature, despite not being the closest to the Sun?

A) Mercury

B) Mars

C) Venus

D) Jupiter

18. What are the dark, cooler areas on the surface of the Sun called?

A) Solar Flares

B) Sunspots

C) Prominences

D) Corona

19. How many planets in our solar system have known natural satellites (moons)?

A) Four

B) Six

C) Eight

D) Seven

20. What is the name of the galaxy that contains our Solar System?

A) Andromeda

B) Milky Way

C) Pinwheel

D) Black Eye

21. What is a light-year a measure of?

A) Time

B) Speed

C) Distance

D) Brightness

22. Which planet has a prominent storm known as the 'Great Red Spot'?

A) Mars

B) Saturn

C) Jupiter

D) Neptune

23. What is the collection of dust and gas from which stars are born called?

A) Nebula

B) Comet

C) Galaxy

D) Asteroid

24. Which planet is known as the 'Morning Star' or 'Evening Star' because of its brightness?

A) Mercury

B) Venus

C) Mars

D) Saturn

25. What holds the planets in their orbits around the Sun?

A) Magnetic fields

B) Solar wind

C) Gravitational pull

D) Atmospheric pressure