

Astrophysics Basics

Astrophysics · Answer Key · 18 Questions

1. What is the closest star to Earth?

A) Proxima Centauri

B) The Sun

C) Sirius

D) Betelgeuse

2. Which planet is known as the 'Red Planet'?

A) Venus

B) Jupiter

C) Mars

D) Saturn

3. What is the center of our solar system?

A) The Earth

B) The Moon

C) The Sun

D) The Milky Way

4. Which galaxy is home to the Earth?

A) Andromeda

B) Milky Way

C) Triangulum

D) Whirlpool

5. What force keeps planets in orbit around the Sun?

A) Gravity

B) Magnetism

C) Friction

D) Air pressure

6. Which planet has the most prominent ring system?

A) Mars

B) Jupiter

C) Saturn

D) Neptune

7. What is the name of the natural satellite that orbits the Earth?

- A) Phobos
- B) Titan
- C) The Moon**
- D) Europa

8. Which planet is the largest in our solar system?

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

9. What do we call a giant explosion that occurs at the end of a massive star's life?

- A) Supernova**
- B) Nebula
- C) Black hole
- D) White dwarf

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

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

11. Approximately how long does it take for light from the Sun to reach Earth?

- A) 8 seconds
- B) 8 minutes**
- C) 8 hours
- D) 8 days

12. What is the primary gas that makes up the Sun?

- A) Oxygen
- B) Nitrogen
- C) Hydrogen**
- D) Carbon dioxide

13. Which planet is known for its blue color due to methane in its atmosphere?

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

14. What term describes a region of space where gravity is so strong that even light cannot escape?

A) Asteroid belt

B) Black hole

C) Comet

D) Galaxy

15. What are stars mostly composed of?

A) Rock

B) Ice

C) Gas

D) Liquid metal

16. Which celestial body is currently classified as a dwarf planet?

A) Pluto

B) Jupiter

C) Saturn

D) Mercury

17. What is the term for a collection of stars, gas, and dust held together by gravity?

A) Planet

B) Asteroid

C) Galaxy

D) Moon

18. What phase of the moon occurs when the side facing Earth is fully illuminated?

A) New moon

B) Full moon

C) Crescent moon

D) Half moon