

High School Astronomy Fundamentals

Astronomy · Practice Test · 8 Questions

1. Which region in the Solar System separates the orbits of Mars and Jupiter?

- A) Kuiper Belt
- B) Asteroid Belt
- C) Oort Cloud
- D) Scattered Disc

2. What is the primary element converted into helium during nuclear fusion inside main sequence stars like the Sun?

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

3. According to Kepler's First Law of Planetary Motion, what shape are the orbits of planets around the Sun?

- A) Perfect circles
- B) Ellipses
- C) Parabolas
- D) Hyperbolas

4. What physical property does a light-year measure?

- A) Time
- B) Distance
- C) Brightness
- D) Mass

5. How is the Milky Way galaxy classified based on its structural shape?

- A) Elliptical galaxy
- B) Irregular galaxy
- C) Barred spiral galaxy
- D) Lenticular galaxy

6. When light from a distant galaxy is 'redshifted', what does this indicate about the galaxy's motion relative to Earth?

- A) It is moving away from Earth
- B) It is moving toward Earth
- C) It is remaining stationary
- D) It is rotating faster

7. What is the main cause of the changing seasons on Earth?

- A) Changes in Earth's distance from the Sun
- B) The tilt of Earth's rotational axis
- C) Fluctuations in solar radiation output
- D) Ocean currents changing speed

8. During a total solar eclipse, which celestial body passes directly between Earth and the Sun?

- A) Mars
- B) Venus
- C) The Moon
- D) Mercury