

1. Which of the following models accurately describes the view of the solar system first developed by the Greeks?

- A) planets are stationary
- B) planets rotate around the sun
- C) planets rotate around the earth
- D) planets are stationary, but stars rotate

2. What breakthrough did Copernicus make in 1543?

- A) He realized that the earth is round.
- B) He realized that planets and stars rotate.
- C) He realized that the moon is not a planet.
- D) He realized that planets rotate around the sun.

3. In 1609, Galileo developed the telescope. What did he discover with this tool?

- A) He discovered a moon orbiting the planet earth.
- B) He discovered moons orbiting the planet Jupiter.
- C) He discovered other stars orbiting our solar system.
- D) He discovered that the orbit of the planets is elliptical.

4. Which of the following discoveries was one of the most important that was made by William Herschel?

- A) He discovered the planet Saturn.
- B) He found a new comet circling earth.
- C) He determined the shape of the galaxy.
- D) He found planets in other solar systems.

5. Which of the following experiments was used to prove Einstein's Theory of General Relativity?

- A) Scientists mapped the orbits of nearby solar systems.
- B) Scientists viewed light bending around a bowling ball.
- C) Scientists charted the position of stars throughout a year.
- D) Scientists took photos of stars before and during a solar eclipse.

6. What discovery led Edwin Hubble to conclude that the universe is expanding?

- A) The color shift spectrum for a galaxy is almost always shifted to the red.
- B) The color shift spectrum for a galaxy is almost always shifted to the blue.
- C) The color shift spectrum for a galaxy fluctuates between both red and blue.
- D) The color shift spectrum for a galaxy showed fixed orbits for distant galaxies.

7. Which of the following interstellar objects was first located by Carl Jansky using radio astronomy?

- A) a black hole
- B) a supernova
- C) a distant galaxy
- D) a nearby solar system

8. Which of the following did Robert Wilson and co-workers discover in support of the Big Bang Theory?

- A) The universe is expanding rapidly.
- B) The universe has many galaxies close to ours.
- C) The universe is composed of billions of galaxies.
- D) The universe has background microwave radiation.

9. How do astronomers find planets in other solar systems?

- A) They can directly observe them with a telescope.
- B) They monitor the pattern of movement and light from a star.
- C) They chart the curvature of space as light bends around a star.
- D) They predict the acceleration of nearby stars in relation to the planet.

10. What force do scientists such as Saul Perlmutter believe is counteracting gravity and allowing the universe to accelerate the rate of its expansion?

- A) black holes
- B) gray matter
- C) dark energy
- D) curved space