Name _____

Stargazing Wonders: Measuring the Universe with Light

Multiple Choice Questions

1. What is the speed of light in a vacuum?

a) 299,792 kilometers per second

b) 1,000,000 miles per hour

c) 10,000,000 meters per second

d) 186,282 miles per second

2. What technique do astronomers use to measure the distance to nearby stars?

a) Blueshift

b) Redshift

c) Parallax

d) Refraction

3. What does the Doppler effect describe in the context of measuring stellar speeds?

a) The shifting of star positions

b) The change in star color

c) The change in star temperature

d) The change in star brightness

4. Which unit of measurement is often used by astronomers to express vast distances in space?

a) Astronomical units

b) Parsecs

c) Light years

d) Galactic years

5. What does the redshift of an object's light indicate in terms of its motion?

a) It is moving away from Earth.

b) It is stationary.

c) It is moving closer to Earth.

d) It is rotating on its axis.