

Name \_\_\_\_\_

## Measuring the Universe: The Distance to Stars and Galaxies

### Multiple Choice Questions

1. How does the parallax method work to measure the distance to stars?
  - A) By observing the change in a star's color
  - B) By measuring the angle between two stars
  - C) By observing a star from different positions in Earth's orbit
  - D) By analyzing the star's brightness over time
  
2. What is the inverse square law in astronomy used for?
  - A) Measuring the temperature of stars
  - B) Calculating the speed of light
  - C) Determining the brightness of objects at different distances
  - D) Predicting the life cycle of stars
  
3. Which type of star pulsates and is used as a distance indicator in space?
  - A) Neutron star
  - B) Black hole
  - C) Cepheid variable
  - D) Red giant
  
4. What are "standard candles" in astronomy?
  - A) Objects with consistent brightness used to measure distance
  - B) Bright stars visible in the night sky
  - C) Celestial events like meteor showers
  - D) Stars that emit colored light
  
5. What does the redshift of light from distant galaxies help astronomers determine?
  - A) The temperature of the galaxies
  - B) The size of the galaxies
  - C) The distance and the expansion rate of the universe
  - D) The composition of the galaxies

