

Name _____

Measuring the Universe: The Distance to Stars and Galaxies

Open-Ended Response Questions

1. Explain the concept of parallax and how it helps astronomers measure the distance to nearby stars.
2. Describe the significance of Cepheid variable stars in astronomy and how they are used to determine cosmic distances.
3. What role do supernovae play as "standard candles" in measuring cosmic distances, and why is this important?
4. Explain the connection between redshift and Hubble's Law and how they provide insights into the structure of the universe.

