

Name _____

The Cosmic Puzzle

Multiple Choice Questions

1. Who are the scientists dedicated to studying the mysteries of the cosmos and its large-scale structure?
 - a) Astronauts
 - b) Biologists
 - c) Astronomers and cosmologists
 - d) Geologists

2. What technique do astronomers use to determine the distance and speed of galaxies?
 - a) Cosmic background radiation
 - b) Redshift and the Doppler Effect
 - c) Supercomputer simulations
 - d) Star cataloging

3. How does redshift help scientists study the large-scale structure of the universe?
 - a) By revealing the colors of galaxies
 - b) By measuring the age of galaxies
 - c) By showing the distribution of matter
 - d) By indicating the speed and distance of galaxies

4. What is the cosmic microwave background (CMB) radiation, and why is it important in cosmology?
 - a) Ancient light from stars
 - b) Leftover radiation from supernovae
 - c) Ancient light from the Big Bang, providing insights into the early universe
 - d) Radio waves from distant galaxies

5. How do supercomputer simulations assist scientists in studying the universe's large-scale structure?
 - a) By launching rockets into space
 - b) By creating virtual galaxies
 - c) By recreating the universe's evolution and simulating galactic interactions
 - d) By mapping cosmic filaments

