

Name _____

Unveiling the Mystery: Dark Matter and Its Cosmic Significance

Multiple Choice Questions

1. What is dark matter primarily composed of?
 - a) Ordinary matter like stars and planets
 - b) Electromagnetic radiation
 - c) A mysterious substance not composed of known particles
 - d) Light-absorbing particles

2. How does dark matter interact with electromagnetic radiation like light?
 - a) It emits light.
 - b) It absorbs light.
 - c) It reflects light.
 - d) It does not interact with light.

3. What provides indirect evidence for the existence of dark matter?
 - a) Telescopic images of dark matter
 - b) Gravitational lensing
 - c) Direct observations of dark matter particles
 - d) Emission of electromagnetic radiation by dark matter

4. Why do galactic rotation curves suggest the presence of dark matter?
 - a) They show that galaxies are stationary.
 - b) They reveal stars at the outer edges of galaxies moving at unexpectedly high speeds.
 - c) They indicate that galaxies are losing stars.
 - d) They demonstrate that galaxies are merging with each other.

5. What role does dark matter play in the universe's structure?
 - a) It causes galaxies to collide.
 - b) It helps galaxies maintain their structure and prevents them from flying apart.
 - c) It is responsible for star formation.
 - d) It influences the cosmic microwave background radiation.

