

Name _____

Gravity Unveiled: Can It Exist Without Mass?

Multiple Choice Questions

1. What is gravity's dependence on mass?
 - a) Gravity depends on the distance between objects.
 - b) Gravity depends on the shape of objects.
 - c) Gravity depends on the mass of objects.
 - d) Gravity depends on the speed of objects.

2. According to Sir Isaac Newton's law of universal gravitation, what does gravity depend on?
 - a) The distance between objects only
 - b) The mass of objects only
 - c) The color of objects only
 - d) The shape of objects only

3. What are massless particles?
 - a) Particles that are extremely heavy
 - b) Particles that have no color
 - c) Particles that travel at the speed of light and have no rest mass
 - d) Particles that are smaller than atoms

4. Can massless particles, like photons, be influenced by gravity?
 - a) Yes, because they have mass.
 - b) No, because they have no mass.
 - c) Yes, because gravity depends on the speed of particles.
 - d) No, because they travel too fast.

5. Who developed the theory of general relativity, which changed our understanding of gravity?
 - a) Sir Isaac Newton
 - b) Johannes Kepler
 - c) Albert Einstein
 - d) Galileo Galilei

