

Name \_\_\_\_\_

## The Dance of Planets: How Gravity Shapes Their Orbits Around the Sun

### Multiple Choice Questions

1. What is the force responsible for shaping and maintaining planetary orbits around the Sun?

- a) Electromagnetic force
- b) Inertia
- c) Gravitational force
- d) Magnetic force

2. Who formulated the three laws of planetary motion that helped explain how planets move around the Sun?

- a) Isaac Newton
- b) Galileo Galilei
- c) Johannes Kepler
- d) Albert Einstein

3. What path do planets follow around the Sun?

- a) Circular
- b) Elliptical
- c) Parabolic
- d) Hyperbolic

4. Why do planets move faster when they are closer to the Sun in their orbits?

- a) Because they experience less gravitational force
- b) Because the Sun's gravity is weaker at close distances
- c) Because the law of harmonic time dictates it
- d) Because they have less inertia

5. What is the force that keeps planets in their stable orbits around the Sun?

- a) Solar wind
- b) Magnetic force
- c) Gravitational attraction
- d) Electromagnetic radiation

