

Name _____

Galaxies' Influence On The Motion of Stars and Planets

Multiple Choice Questions

1. What plays a central role in shaping the motions of stars and planets within galaxies?
 - a) Galactic density
 - b) Galactic tides
 - c) Gravitational forces
 - d) Stellar orbits

2. How does the strength of a galaxy's gravitational field influence the orbits of stars?
 - a) It causes stars to move in straight lines.
 - b) It makes stars move at constant speeds.
 - c) It determines the shape and speed of their orbits.
 - d) It has no effect on stellar orbits.

3. In which regions of galaxies do stars experience stronger gravitational forces and more crowded environments?
 - a) Outer regions
 - b) Spiral arms
 - c) Central bulges
 - d) Galactic halos

4. What do galactic tides do to stars' orbits within a galaxy?
 - a) Make them move faster
 - b) Stretch them into elongated paths
 - c) Circularize their orbits
 - d) Remove them from the galaxy

5. What invisible substance contributes to the gravitational dance within galaxies?
 - a) Dark energy
 - b) Dark matter
 - c) Anti-matter
 - d) Neutrinos

