

Name \_\_\_\_\_

## Galaxies' Influence On The Motion of Stars and Planets

### Short Answer

1. Describe the role of galactic tides in shaping stars' orbits within galaxies.
2. How does dark matter influence the motion of stars and planets within galaxies, even though it cannot be observed directly?
3. Explain why the interactions between galaxies can lead to disruptions in the stable orbits of stars and planets.
4. What tools and techniques do astronomers use to study the motions of stars and planets within galaxies?
5. Why is understanding the influence of galaxies on the motion of celestial objects crucial for astronomers' research and knowledge of the cosmos?

