

Name \_\_\_\_\_

## How Are Moons Formed?

### Open-Ended Response Questions

1. Compare and contrast the formation processes of moons through capture, accretion, and the giant impact hypothesis. Include key differences and similarities in their mechanisms.
2. Imagine you are an astronomer tasked with studying the characteristics of a newly discovered moon in our solar system. Describe the steps you would take to determine the moon's formation mechanism and its potential implications for our understanding of the solar system's history.
3. Explore the significance of understanding moon formation processes in the context of planetary science and space exploration. How can knowledge about moon formation inform our understanding of the broader universe?
4. Explain why the variety of moons in our solar system is important for scientific research and exploration efforts. Provide examples of specific moons that have contributed valuable insights to our understanding of celestial bodies.

