

Name \_\_\_\_\_

## Moons and Their Features

**Instructions:** Answer each question in 2–4 sentences. Use complete sentences, and provide details to show your understanding of the topic.

1. **Europa's Icy Surface** – What evidence suggests Europa might have a liquid ocean beneath its ice, and why is this important to scientists?
2. **Titan's Atmosphere** – Describe two unique characteristics of Titan's atmosphere and how it affects the moon's surface.
3. **Io's Volcanic Activity** – What causes Io to be the most volcanically active body in the Solar System?
4. **First Moon Discovery** – Who discovered Jupiter's four largest moons, and why was this discovery significant at the time?
5. **Retrograde Orbits** – What does it mean for a moon to have a retrograde orbit, and which large moon in our Solar System has this feature?
6. **Moon Craters** – How are most craters on the Moon (Earth's) formed, and what do they tell scientists about its history?
7. **Enceladus' Geysers** – What have spacecraft observed erupting from Enceladus, and what does this suggest about its interior?
8. **Callisto's Surface** – How does Callisto's surface differ from Europa's in terms of geological activity and crater coverage?
9. **Phobos' Future** – What is expected to happen to Phobos in the distant future, and why?
10. **Apollo Missions** – What was the main purpose of the Apollo missions to the Moon, and name at least one important outcome from them.

