

Name \_\_\_\_\_

## Moon Marvels: Our Closest Celestial Companion

### Open-Ended Response Questions

1. Imagine you are an astronaut on a mission to explore a distant moon in our solar system. Describe the preparations you and your team would need to make, the challenges you might encounter, and the scientific goals of your mission.
2. Discuss the potential benefits of studying moons in our solar system and how the knowledge gained from such studies can enhance our understanding of planetary processes and space exploration.
3. Investigate and describe any cultural or historical significance associated with Earth's moon. How has it influenced human culture, mythology, or scientific discoveries?
4. Explain how the concept of synchronous rotation can result in one side of a moon always facing its parent planet. Use diagrams or visual aids if needed to illustrate your explanation.

