

Name \_\_\_\_\_

## Hunting for Alien Life: Are We Alone in the Universe?

### Open-Ended Response Questions

1. Imagine you are a scientist tasked with exploring a distant exoplanet. Describe the equipment and instruments you would take on your mission and what specific signs of extraterrestrial life you would be searching for.
2. Discuss the challenges scientists face when searching for life on other celestial bodies within our solar system, such as Mars or Europa.
3. Reflect on the idea that we have yet to discover definitive evidence of extraterrestrial life despite the vastness of the universe. What are some possible explanations for this, and how might we continue the search?
4. Imagine you are an astronaut sent on a mission to explore the subsurface ocean of Europa, one of Jupiter's moons. Describe the precautions you would need to take, the equipment you would use, and the potential discoveries you hope to make.

