

Name _____

Could Humans Call the Moon Home?

Open-Ended Response Answer Key

1. Living on the Moon presents challenges such as the lack of a breathable atmosphere, extreme temperatures, and the need for life support. On Earth, we have a stable environment with readily available resources, while the Moon requires careful planning and technology for human survival.
2. Establishing a human presence on the Moon offers opportunities for scientific research, space exploration, and as a stepping stone for missions to Mars and beyond. It allows us to study the Moon's geological history and adaptability to lunar living, which can inform future space endeavors.
3. As an astronaut on the Moon, my daily routine would involve conducting experiments, maintaining equipment, and addressing basic needs like food, water, and exercise. Psychological well-being would be supported through regular communication with Earth and recreational activities.
4. Lunar colonization can pave the way for future missions to Mars by serving as a testing ground for technologies and strategies. Lessons learned on the Moon, such as resource utilization and life support, can be applied to long-duration missions to more distant destinations.

