

Name _____

Sound Waves vs. Light Waves: A Journey into the World of Waves

Open-Ended Response Questions

1. Discuss one practical application of sound waves in our daily lives and one application of light waves. How do their properties affect their usefulness in these applications?
2. Imagine you are on a planet where there is no atmosphere, similar to outer space. Explain how this would affect the propagation of sound and light. Would you be able to hear or see anything on this planet?
3. Investigate how the speed of sound in water compares to its speed in air. Provide examples of situations where this difference is essential, such as marine biology research or underwater communication.
4. Explain how our ability to see objects around us relies on the interaction of light waves with those objects. Include details about reflection, refraction, and absorption in your explanation.

