

Name _____

Riding the Wave: Exploring the Main Properties of Waves

Open-Ended Response Questions

1. Imagine you are at the beach, and you see both ocean waves and a seagull flying overhead. Explain how you can identify which one is a wave and which one is not, considering the properties of waves discussed.
2. Think about how waves are used in our daily lives, from communication to medical imaging. Describe one practical application of waves and how understanding their properties is essential in that application.
3. Compare and contrast transverse and longitudinal waves, highlighting their main differences in terms of particle motion and direction.
4. How might the speed of sound waves change when traveling through different mediums, such as air and water? Provide an explanation for the observed differences in wave speed.

