

Name _____

Waving Hello to Wavelength: How it Shapes a Wave's World

Short Answer

1. Explain how wavelength differs in transverse and longitudinal waves, providing examples for each.
2. If you have two waves with different wavelengths traveling through the same medium, which one will likely have a higher speed, and why?
3. How does wavelength affect the pitch of sound waves, and can you provide an example of a high-pitched sound and a low-pitched sound?
4. Describe the relationship between wavelength and the energy carried by a wave, using visible light as an example.
5. Think of a real-life application where understanding the concept of wavelength is crucial, and explain why it is important in that context.

