Name _____

The Ripple Effect: Understanding Mechanical Waves

Short Answer

1. Explain the difference between transverse and longitudinal waves, providing an example of each.

2. How do particles in a medium transfer energy in a transverse wave, and what is the role of amplitude in a wave?

3. Describe how a slinky being compressed and stretched can help illustrate the concept of a longitudinal wave. Include the terms compression and rarefaction in your explanation.

4. What determines the speed of a mechanical wave, and why do sound waves travel faster through solids than gases?

5. If a wave has a high frequency, what can you infer about its wavelength? Provide an example of a high-frequency wave from everyday life.

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