

Name _____

Riding the Wave: Exploring the Main Properties of Waves

Short Answer Key

1. Wavelength measures the distance between two consecutive points on a wave that are in phase. For example, in ocean waves, it's the distance between two wave crests or troughs.
2. Frequency measures the number of wave cycles per second. An everyday example of a high-frequency wave is the sound of a whistle.
3. The amplitude of a wave affects its energy transfer by determining how much energy is carried. Waves with higher amplitudes carry more energy.
4. Reflection occurs when waves bounce back upon encountering a barrier, while refraction is the change in direction when waves pass from one medium to another.
5. Electromagnetic waves, such as light and radio waves, do not require a medium to travel through. An example is sunlight reaching the Earth through the vacuum of space.

