


Lesson 2:
Sound Energy

1



What is sound?
Sound is the movement of energy by vibrations through substances in the form of waves.

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Discovery Education Video:

Sound Waves

3

**Sound waves must travel
through a medium.**

**This medium can be
solid, liquid, or gas.**

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Wavelength and Frequency

Wavelength is the measurement of a wave from crest to crest or from trough to trough.

Frequency describes how often the particles of a medium vibrate when sound waves pass through the medium.

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**Smaller wavelength =
higher frequency**

**Longer wavelength =
lower frequency**

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Frequency is measured in Hertz.

1Hz = 1 Vibration per Second

Humans can hear sounds in the range of 20Hz to 20,000Hz.

Many animals can hear sounds with much higher frequencies.

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Frequency determines the pitch of a sound.

Pitch determines how we hear the sound.

“Find the Musical Note”

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Amplitude

Amplitude is the height of a wave. It measures to the crest or trough of a wave.

Amplitude determines how loud a sound is.

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**Larger Amplitude =
Louder Sound**



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Sound Energy: Key Questions

- 1. What is sound? How does it travel?**
- 2. Does the medium have an effect on sound? Explain.**
- 3. What factors of sound waves affect what we hear? Explain.**