

Science Focus: Year Group: Spring Term

Sound

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Key Knowledge:

What is a sound?

•A noise that can be heard by someone.

How is a sound made?

• A sound happens when something vibrates.

How do sounds travel?

- •Sounds can travel in two ways:
 - 1. Through the air like from a TV speaker across the room to your ears.
 - 2. Through an object/ **material** like stone, brick, water and glass.

How do we hear these vibrations?

- •The **vibrating** air hits our **eardrum** and makes them **vibrate**.
- •The **vibrations** is picked up by our brains and converted to sounds we recognise.



Volume

- •The closer we are to the sound source, the louder the sound will appear to us.
- •The further away, the quieter the sound.

Pitch

- •The pitch is how high or low a sound is.
- •The shorter the **vibrating** object, the higher the **pitch** of the sound.
- •The longer the **vibrating** object, the lower the **pitch**.

Possible Experiments:

Use musical instruments to experiment with pitch.

Experiment with a tin can telephone.

Key Vocabulary:

Vibrates – Move continuously very quickly.

Material - What something is made from.

Sound Wave – Vibrations travelling from a sound source.

Volume - The loudness of a sound.

Amplitude – The size of a vibration. A larger amplitude equals a louder sound.

Pitch – How low or high a sound is.

Particles – Solids, liquids and gases are made of particles. They are so small we are unable to see them.

Soundproof – To prevent sound from passing.

Eardrum – A part of the ear, which is a thin, tough layer of tissue that is stretched out like a drum skin. It separates the outer ear from the middle and inner ear.

Diagrams and Symbols:





