

<b>Science Focus:</b> Sound	<b>Year Group:</b> 4	<b>Spring Term</b>
--------------------------------	-------------------------	--------------------

**Key Knowledge:**

**What is a sound?**

- A noise that can be heard by someone.

**How is a sound made?**

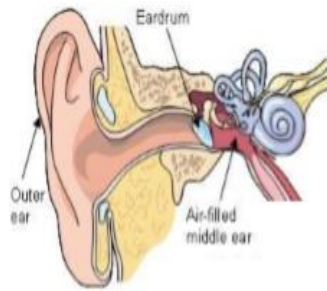
- A sound happens when something **vibrates**.

**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:**

