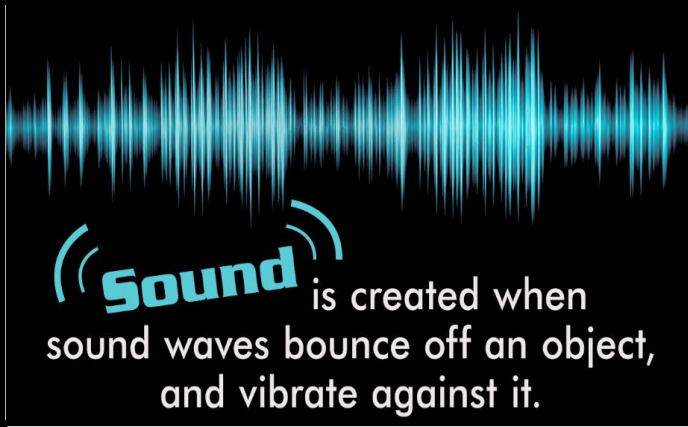
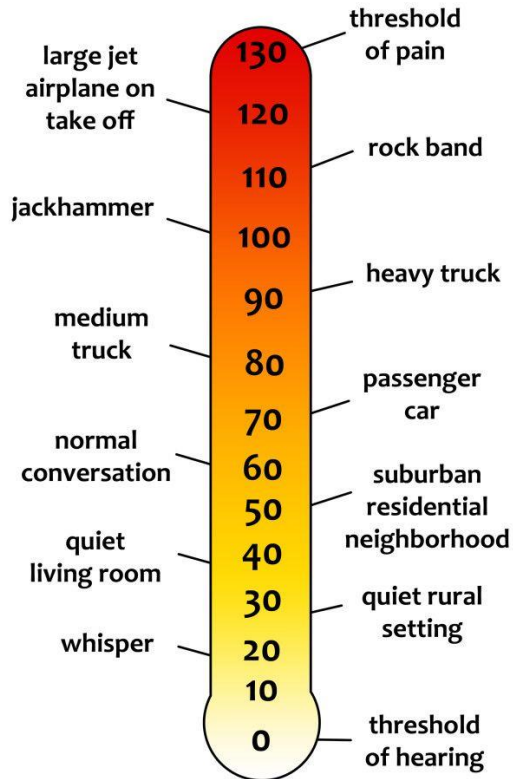


# Sound

## How is sound measured?

Sound is measured in **decibels (DB)**.

### Decibel Scale (dBA)



## How does sound travel?



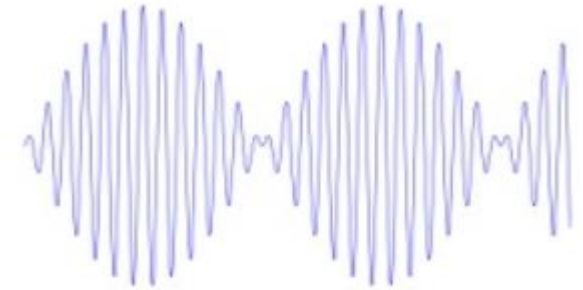
Sound **travels** through **mediums** such as solids, liquids and gases.



Sound travels as a wave, vibrating the particles in the medium it is travelling in.

Sound **cannot travel** through a **vacuum** (an area empty of matter).

## Vibrations



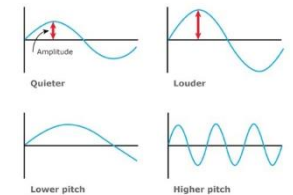
Sounds are made from **vibrations**. These vibrations create **sound waves** which reach our ears.

Our ears **vibrate** too allowing us to hear many different sounds.

## Pitch and Volume

The **pitch** of a sound is how **high** or **low** the sound is.

A high sound has a **high pitch** and a low sound has a **low pitch**.



The loudness or **volume** of a sound is how **loud** or **quiet** the sound is. A nail hit hard makes a loud sound. A nail hit gently makes a quiet sound. Sounds get fainter as the distance from the sound increases.

## Sound Proofing

If you lived near a noisy building site, or a noisy neighbour, you would not want to hear the sounds of the machines or music! You would need to find a way to absorb the sounds so your house remained quiet and peaceful. This is called soundproofing.

