



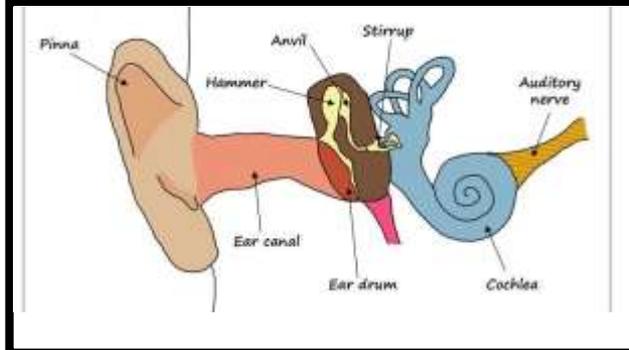
## Year 4 Science: Sound

### What I should already know:

- Sounds can be quiet or loud.
- We use our ears to hear sound.
- Sound gets quieter the further it travels.

### At the end of this topic, I will know:

- identify how sounds are made, associating some of them with something vibrating
- recognise that vibrations from sounds travel through a medium to the ear
- find patterns between the pitch of a sound and features of the object that produced it
- find patterns between the volume of a sound and the strength of the vibrations that produced it
- recognise that sounds get fainter as the distance from the sound source increases



### Key Facts:

A sound produces vibrations which travel through a medium from the source to our ears.

The vibrations cause parts of our body inside our ears to vibrate, allowing us to hear (sense) the sound.

Sounds decrease in volume as you move away from the source.

Pitch is the highness or lowness of a sound and is affected by features of objects producing the sounds. For example, smaller objects usually produce higher pitched sounds.

Different mediums such as solids, liquids and gases can carry sound, but sound cannot travel through a vacuum (an area empty of matter).



### Vocabulary

vibration	A movement backwards and forwards.
sound wave	Vibrations travelling from a sound source.
volume	The loudness of a sound.
amplitude	The size of a vibration. A larger amplitude = a louder sound.
pitch	How low or high a sound is.
ear	An organ used for hearing
particles	Solids, liquids and gases are made of particles. They are so small we are unable to see them.
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. Sound waves make the eardrum vibrate.
vacuum	A space where there is nothing. There are no particles in a vacuum.
soundproof	To prevent sound from passing through.