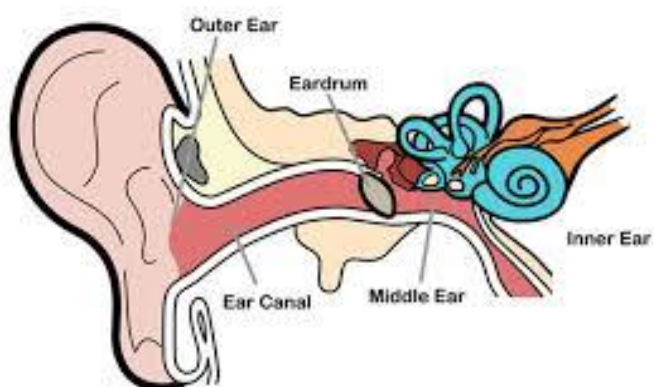


Science		Year 4	
Focus: Sound			
Age related scientific vocabulary			
vibrations	Something moving quickly, shaking	volume	How loud something is
pitch	How high or low a sound is	echo	A reflection of sounds from a surface
soundwave	Sound travels through air, water or solid objects.	decibel	A measure of how loud something is
particle	A minute portion of matter	frequency	How fast something is vibrating
amplify	To make something louder	tension	How tight something is stretched (e.g. a guitar string, a drum skin)
muffle	To make something quieter	source	The origin of a sound, where it starts.



HOW YOU HEAR

Sounds are really **vibrations** in the air. Your ears collect the vibrations and funnel them into the ear **drum**.

The ear drum shakes and passes the vibrations onto three small bones: the **hammer**, **anvil** and **stirrup**. The vibrations then reach the **cochlea**, which is lined with **nerve endings** that send messages to the brain.



The brain then **translates** the vibrations as sounds.

Key Knowledge

- Sound is made when something vibrates.
- This causes the particles around it to vibrate, which cause more particles near-by to vibrate, sending a ripple away from the vibrating sound source.
- Sound waves travel through air, water, and solid objects as vibrations.
- Sound waves make our ear drum vibrate and our brains recognise the sounds.
- The size and shape of sound waves determine the type of sound we hear, high or low pitch.
- Sounds can be reflected off surfaces - these are called echoes.
- A sound becomes quieter as it travels away from its source.
- Sounds can be amplified (made louder) and muffled (made quieter).

Useful websites you might like to explore:

<https://www.bbc.co.uk/bitesize/topics/zgffr82>

<https://www.dkfindout.com/uk/science/sound/>