

Science – Knowledge Organiser Year 4 Spring 2	
Vocabulary	
sound	Type of energy made by vibrations.
vibrate	Move to and fro.
vibration	The act of vibrating.
source	Starting point of the sound.
medium	Any matter (solid, liquid or gas) that allows sound waves to pass through.
vacuum	A space with no matter (solid, liquid or gas).
pitch	A space with no matter (solid, liquid or gas).
soundwave	Movement of sound through a medium.
volume	Measure of loudness.

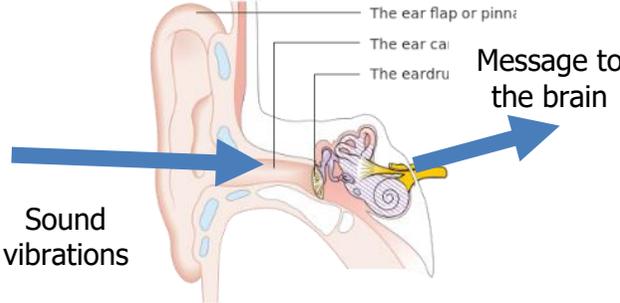
How are sounds made?

Sounds are made when objects vibrate. The vibrations create sound waves.

Sounds travel through different mediums. They travel better through solids than liquids. They travel through liquids better than air.

In a vacuum, there is no matter (solid, liquid or gas) so sounds cannot be heard.

How do we hear a sound?



The ear flap or pinna
The ear canal
The eardrum

Sound vibrations → Message to the brain

The ear catches the sound vibrations. They hit the eardrum making it vibrate. This sends a message to the brain.

Pitch



Low pitch

Low pitch sounds are made from slower vibrations.



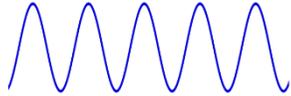
High pitch

High pitch sounds are made from faster vibrations.

Volume

Sound can be loud or quiet depending on how much energy is used to make it. Hitting a drum hard uses more energy so will make a loud sound.

Loud



Quiet



The closer you are to the source of a sound, the louder it will be.