Science	
	Vocabulary
sound	type of energy made by vibrations
vibrate	to move quickly to and fro
vibration	the action of something vibrating
source	starting point (of a sound, for instance)
medium	any matter (solid, liquid or gas) that allows sound waves to pass through
vacuum	a space with no matter (solid, liquid or gas)
muffle	to quieten a sound (for instance, by wrapping it in something)
soundwave	the shape of the movement of sound through a medium
volume	measure of loudness
pitch	how high or low a sound is
sound insulator	a material that reduces the amount of sound passing through it

## How are sounds made?

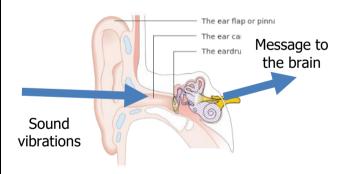
- Knowledge Organiser Year 4 Spring 2

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

Sounds travel through different mediums. They travel better though 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 '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.

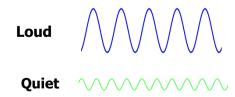


High pitch

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.



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

