
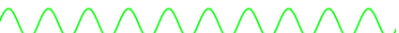
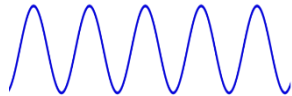



Science – Knowledge Organiser Year 4 Spring 2

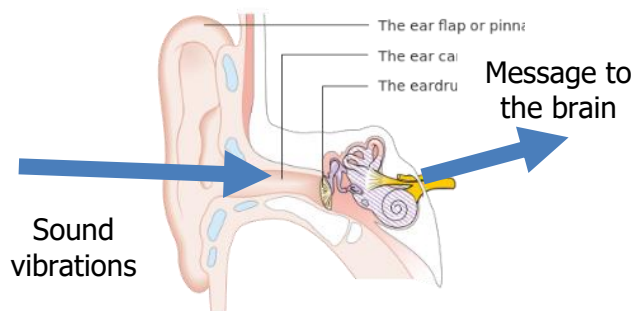
Vocabulary		How are sounds made?	Pitch
sound	type of energy made by vibrations	Sounds are made when objects vibrate. The vibrations create sound waves.	 Low pitch
vibrate	to move quickly to and fro		Low pitch sounds are made from slower vibrations.
vibration	the action of something vibrating	Sounds travel 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.	 High pitch
source	starting point (of a sound, for instance)		High pitch sounds are made from faster vibrations.
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		Volume
pitch	how high or low a sound is		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.
sound insulator	a material that reduces the amount of sound passing through it		 Loud
			 Quiet
			The closer you are to the source of a sound, the louder it will seem.

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 '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 seem.