

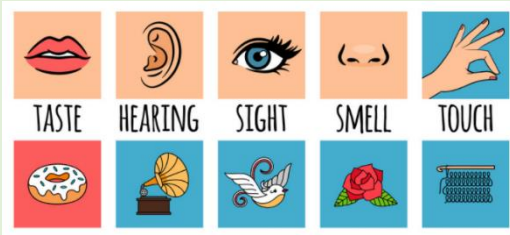


Knowledge Organiser

Science Year 4 Topic: Sound

Prior Knowledge

Hearing is one of my five senses.



Sounds can be combine using musical instruments.



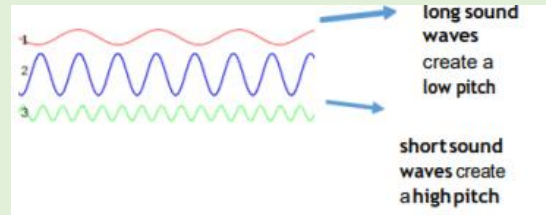
What the word vibration means.

Knowledge and Application

Pitch

High pitch sounds are created by short sound waves.

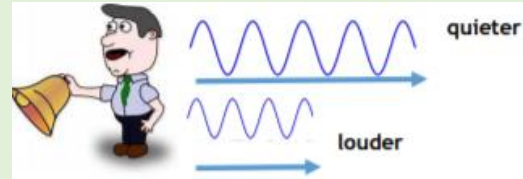
Low pitched sounds are created by long sound Waves



Volume

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

The further away you are from the source of the sound, the quieter the sound will be.



What will I know by the end of this topic?

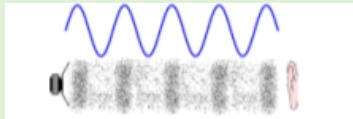
The object that makes the sound is called the source.

When objects vibrate, a sound is made. The vibration makes the air around the object vibrate and the air vibrations enter your ear. These are called sound waves.



Sound waves travel through a medium (such as air, water, glass, stone, and brick).

The pitch of a sound is how high or low it is.



The volume of a sound is how loud or quiet it is.

A vibration with lots of energy makes a powerful sound wave and therefore a loud sound.

Amplitude measures how strong a sound wave is. Decibels measure how loud a sound is.

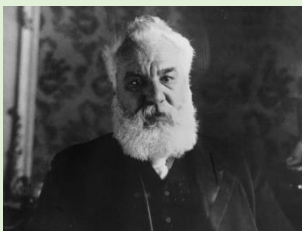
Frequency measures the number of times per second that the sound wave cycles.

Key Vocabulary

Amplitude	a measure of the strength of a sound wave
Energy	the power from sources such as electricity that makes machines work or provides heat
Frequency	a measure of how many times per second the sound wave cycles
Medium	something that makes possible the transfer of energy from one location to another
Power	Power is energy, especially electricity, that is obtained in source and used to operate lights,
pattern seeking	making measurements or observations to explore situations where there are variables that we can't easily control
Sound waves	invisible waves that travel objects as vibrations through air, water, and solid
source	where something comes from
vibrations	invisible waves that move quickly
Volume	how loud or quiet a sound is

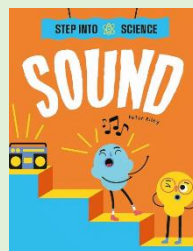
Scientist

Alexander Graham-Bell  
<https://www.britannica.com/biography/Alexander-Graham-Bell>



Books/websites

<https://www.bbc.co.uk/bitesize/topics/zgffr82/articles/z8s62v4>



Step into Science; Sound, Peter Riley