

How can we hear so many different sounds?

Subject: Science

Link Topics: Geography

Questions I will ask:

1. What is pitch, vibration and frequency?
2. How does sound travel?
3. How do our ears work?
4. How does a telephone work?
5. How can we reduce the amount of sound we hear?
6. What are sound waves?

Prior Learning:

In Year 3 we looked at the ear as one of our 5 senses.

Facts I will learn:

Sound waves travel through a medium. Eg. Air, water, glass, stone.

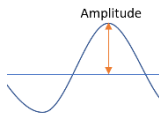

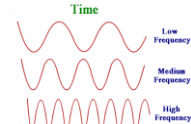
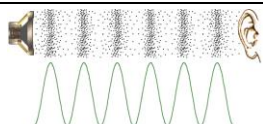
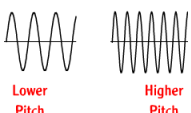
When an object vibrates, the air vibrates to this is called **sound waves**.

The sound waves travel to the ear and allow the ear drum to vibrate.

A vibration with lots of energy will increase the volume of the sound.

Different materials may stop the sound waves travelling. Sound can move in different directions and around objects.

High pitch sounds are created by shorter sound waves.
Low pitch sounds are created by longer sound waves.

<u>Vocabulary</u>		<u>Visual</u>
<u>Amplitude</u>	A measure of strength of the sound wave.	
<u>Decibel</u>	A measure of how loud the sound is.	
<u>Frequency</u>	A measure of how many times per second a sound wave cycles.	
<u>Medium</u>	Something that allows the sound wave to travel from one source to the next source.	
<u>Pitch</u>	How high or low a sound is.	
<u>Vibrations</u>	Invisible waves that move quickly.	