



KEY VOCABULARY

Sound	Vibrations that travel through the air or another medium and can be heard when reaching an ear.
Source	A place, person or thing from which something originates from.
Quiet	Making little or no noise.
Noise	A sound, especially one that is loud.
Vibration	Particles moving back and forth.
Travel	Go from one place to another.
Volume	Degree of loudness of a sound.
Faint	Something barely heard.
Pitch	The degree of highness or lowness of a tone.
Tuning	The act of tuning something so it is the correct pitch.
Amplitude	The number of molecules moved due to the vibration of sound.
Insulation	Protect something to stop sound.
Muffle	Make a sound quieter or less distinct.

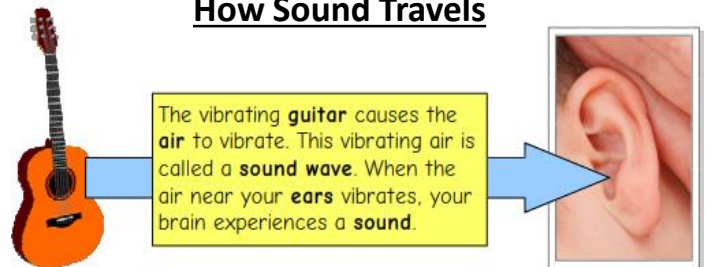
LINKS IN THE CURRICULUM:

Year 4 - Electricity - insulators
Whole School - Music - Pitch, volume, how to make sounds from instruments.

Key Knowledge

- Sound is made through vibrations.
- Sound travels through a medium to the ear. It then vibrates on our ear drum so we can hear the vibrations.
- Sound can travel through solids, liquids and gasses. It travels easiest through solids due to the particles being closer together.
- Sound travel can be reduced by changing the material that the vibrations travel through.
- Sound travel can be blocked.
- Some animals have cone shaped ears which help them to hear better than humans. Some animals can move their ears so they don't have to move their whole head towards the sound.
- A fair test is when one variable is changed and everything else is kept the same so something can be measured and observed.

How Sound Travels

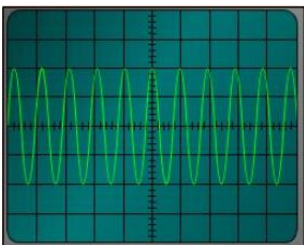


Working Scientifically

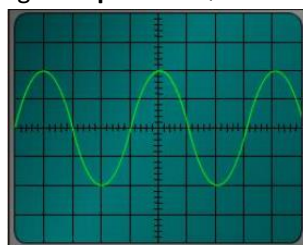
- By **finding patterns** in the sounds that are made by similar objects of different sizes.
- By **making ear muffs** from a variety of different materials to **investigate** which provides the best insulation against sound.

Sound Waves

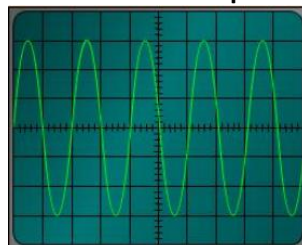
Sound waves are how vibrations travel. Higher pitched sounds vibrate faster and lower pitched sounds vibrate slower. Loud sounds have a larger **amplitude**. Quiet sounds have a smaller **amplitude**.



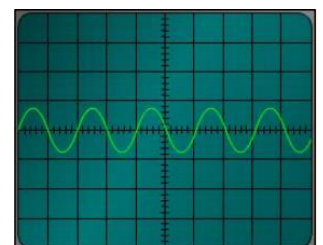
High Pitch



Low Pitch



Loud Sound



Quiet Sound