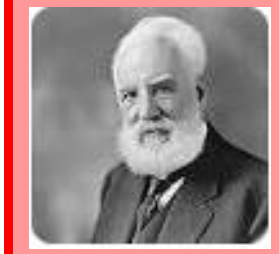
Science	Sound	Year 4

Key Vocabulary

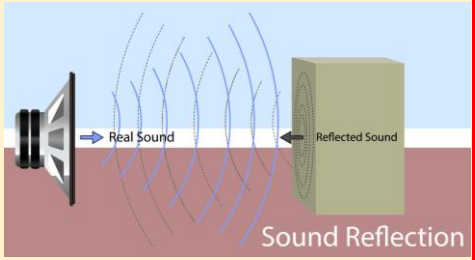
WORD	DEFINITION
Amplitude	a measure of the strength of a soundwave
Decibels	The unit to measure loudness
Energy	The power to make something work, move or grow.
Instruments	Objects used to play music.
Materials	Anything used in making something or building.
Medium	A substance such as air, water or a solid
Particles	Tiny pieces that make up something larger
Pitch	How high or low a sound is.
Reflect	Bounces back from a surface
Sound source	The object that started the sound.
Source	The start of something
Vibration	Particles moving very quickly.
Volume	How loud or quiet a sound is.



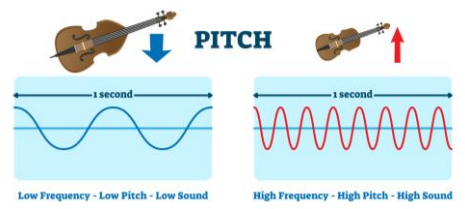
Key Scientist –
Alexander Graham Bell is a Scottish born scientist (1847) who invented the telephone in 1876 at the age of 29. He formed the Bell Telephone Company in 1887.

Key Knowledge

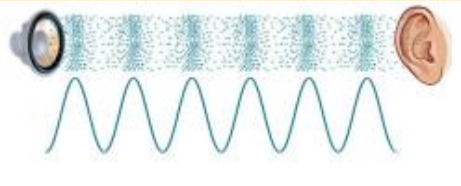
- Sound is a type of energy. Sounds are created by vibrations. The louder the sound, the bigger the vibration.



- The sound waves travel to the ear and make the eardrums vibrate. Messages are sent to the brain which recognises the vibrations as **sounds.**
- Pitch is a measure of how high or low a sound is. A whistle being blown creates a high-pitched sound. A rumble of thunder is an example of a low-pitched sound.



- You can change the pitch of a sound in different ways depending on the type of instrument you are playing. For example, if you are playing a xylophone, striking the smaller bars with the beater causes faster vibrations and so a higher pitched note. Striking the larger bars causes slower vibrations and produces a lower note.
- Inside your ear, the vibrations hit the eardrum and are then passed to the middle and then the inner ear. They are then changed into electrical signals and sent to your brain. Your brain tells you that you are hearing a sound.



- Sound can travel through solids, liquids and gases. Sound travels as a wave, vibrating the particles in the medium it is travelling in. Sound cannot travel through a vacuum.
- The size of the vibration is called the amplitude. Louder sounds have a larger amplitude, and quieter sounds have a smaller amplitude