

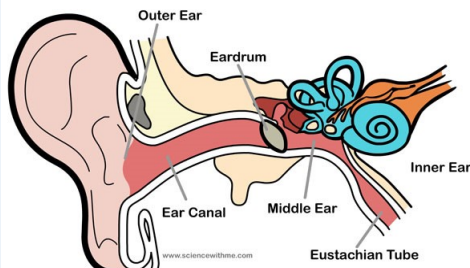
Science Year 4 - Spring 1: Sound

Key vocabulary to learn and use in your learning

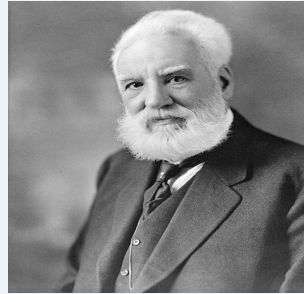
Word	Definition
sound waves	Vibrations, formed by objects that we can hear.
frequency	How many sound waves there are per second
high pitch	A high note or sound produced by faster sound waves.
low pitch	A low note or sound produced by slower sound waves.
tuning	To adjust musical pitch, usually of an instrument.
ear canal	The hole in the side of your head that lets sound waves in.
ear drum	Part of the ear that vibrates when sound waves hit it.
decibels	A unit for measuring the loudness of sounds.
sound insulator	A material that doesn't let sound waves through.
particle	Solids, liquids and gases are made up of particles. They are so small we are unable

Key knowledge to learn

Parts of the Ear



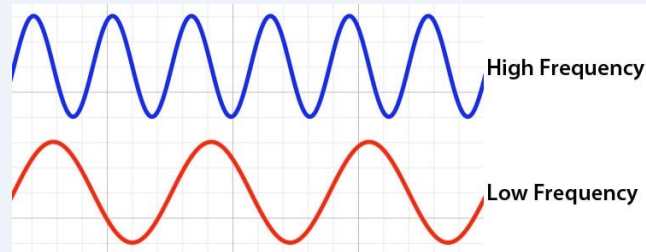
There are 3 major parts of the ear that help us to hear. These are: the outer ear, the middle ear and the inner ear.



Alexander Graham-Bell (March 1847– August 1922) . A Scottish born American inventor, who invented the first working telephone. He first became interested in the science of sound as both his mother and wife were deaf. His experiments led to him finally being able to send sound signals down a telephone wire.



Sound Waves



The higher the frequency, the more quickly air particles vibrate and the higher the pitch. In sound waves, a high pitch means a high note and a low pitch is a low note.

Key knowledge to learn

- Sound can travel through solids, liquids and gases. Sound travels as a wave , vibrating the particles in the medium it is travelling in. Sound can not travel through a vacuum.
- When you hit the drum, the drum skin vibrates. This makes the air particles closest to the drum start to vibrate as well.
- The vibrations then pass to the next air particle, then the next, then the next. This carries on until the air particles closest to your ear drum vibrate, passing the vibrations into your ear.
- Sound energy can travel from particle to particle far easier in a solid because the vibrating particles are closer together than in other states of matter.

