

Sound

Significant Scientists

**Alexander Graham Bell**



Alexander Graham Bell (1847 - 1922) was a Scottish scientist, inventor and engineer who invented the telephone in 1876.

**Galileo Galilei**



The modern study of waves and acoustics is said to have originated with Galileo Galilei (1564 - 1642), who elevated to the level of science the study of vibrations and the correlation between pitch and frequency of the sound source.

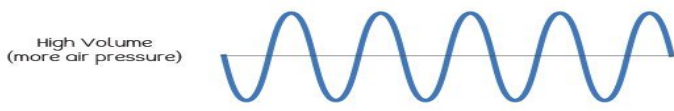
Working Scientifically Skills

Plan an enquiry.

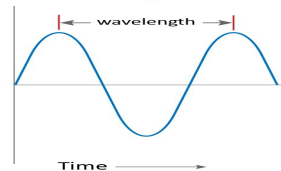
Gather, record, classify and present data in a variety of ways to help in answering questions.

Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.

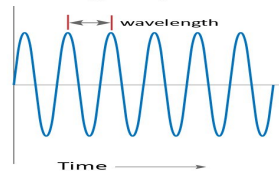
Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.



**Low pitch**



**High pitch**



Key Knowledge

Sound is a thing that can be heard. The object that makes the sound is called a source.

When objects vibrate, a sound is made. The vibration makes the air around the object vibrate and the air vibrations enter the ear. These are called sound waves. If an object is making a sound, a part of it is vibrating, even if you cannot see the vibrations.

Sound waves travel to the ear and make the eardrum vibrate. Messages are sent to the brain which recognises the vibrations as sound.

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

Sound is measured in different ways.

Enquiry Skills

Identifying and classifying

Fair testing

Observing over time

Pattern seeking

Key Vocabulary

<b>amplitude</b>	Measures how strong a sound wave is.
<b>decibels</b>	Measure how loud a sound is.
<b>frequency</b>	Measures the number of times per second that the sound wave cycles.
<b>vibration</b>	Invisible waves that move very quickly.
<b>soundwave</b>	Invisible wave that travels through the air, water and solid objects as vibrations.
<b>volume</b>	How loud or quiet a sound is.
<b>pitch</b>	How high or low a sound is.
<b>tone</b>	The quality or character of a sound.
<b>insulation</b>	When sound waves are prevented from permeating.

