

Sound

Vocabulary

vibration	A movement backwards and forwards.
sound wave	Vibrations travelling from a sound source.
amplitude	The size of a vibration. A larger amplitude = a louder sound.
pitch	How low or high a sound is.
ear	An organ used for hearing.
particles	Solids, liquids and gases are made of particles. They are so small we are unable to see them.
distance	A measurement of length between two points.
soundproof	To prevent sound from passing.
absorb sound	To take in sound energy. Absorbent materials have the effect of muffling sound.
vacuum	A space where there is nothing. There are no particles in a vacuum.
eardrum	A part of the ear which is a thin, tough layer of tissue that is stretched out like a drum skin. It separates the outer ear from the middle and inner ear. Sound waves make the eardrum vibrate.
sound source	Something that makes a sound.
volume	How loud a sound is.



©m.bonotto/shutterstock
Guiro

Claves



Rainsticks



Castanets

Hand drums



Key knowledge

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

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.

Sound is produced by vibrations, even when it is hard to see them. The vibrations travel through the air and are detected by our ears. Within the ear is an ear drum which vibrates and turns the vibrations into signals to the brain, which then 'hears' the sounds.

The speed of sound in air is approximately 340 metres per second.

The loudness (volume) of a sound depends on the size of the vibration: the bigger the vibration, the louder the sound.

Pitch refers to how high or low a sound is. A high-pitched sound has a high frequency. A low-pitched sound has a low frequency. Frequency is the number of vibrations per second.

You can't hear anything in space because there is nothing for the sound to travel through.

Dogs can hear noises that we can't, as they can hear higher sounds than humans.

Sound is used by many animals to detect danger, warning them of possible attacks before they happen.