Sound

Unit Vocabulary — Join them up with the correct definition once you have learned it,

vibration

sound wave

volume

amplitude

pitch

particles

absorb

vacuum

ear drum

A space where there is nothing. There are no particles in a vacuum.

The size of a vibration.

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.

How low or high a sound is.

Vibrations travelling from a sound source.

To take in sound energy. To muffle sound.

The loudness of a sound.

A quick movement back and forth

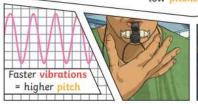
Solids, liquids and gases are made of these. They are so small we are unable to see them

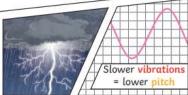
Key Knowledge

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

The size of the vibration is called the amplitude. louder sounds have a larger amplitude, and quieter sounds have a smaller amplitude. quiet

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





Key Knowledge

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.

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 vibrate, passing the vibrations into your ear.



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.



Scientific Enquiries

- identify how sounds are made, associating some of them with something vibrating
- recognise that vibrations from sounds travel through a medium to the ear
- $\ ^{\blacksquare}$ find patterns between the pitch of a sound and features of the object that produced it
- find patterns between the volume of a sound and the strength of the vibrations that produced it
- recognise that sounds get fainter as the distance from the sound source increases

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.

