

Vacuum



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ESSENTIAL VOCABULARY	
Vibration	A quick movement back and forth.
Sound wave	Vibrations travelling from a sound source.
Volume	The loudness of a sound.
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 can't see them.
Distance	A measurement of length between two points.
Soundproof	To prevent or stop sound passing through.
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.

SCIENCE KNOWLEDGE ORGANISER



Key Questions

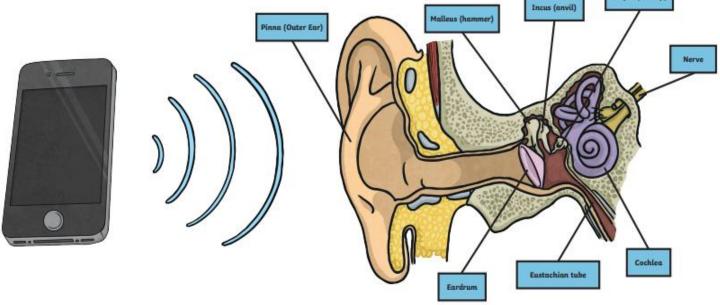
How do we hear sound? What is sound? What materials are best for soundproofing? How do animals rely on sound?

Key Themes

- How sound travels
- How sound changes dependant on distance from source.
- Dangers of sound
- Animal use of sound (echolocation)

Useful Diagrams

How Does Hearing Work?



When an object gives off sound it vibrates.

The vibrations bump into air molecules.

A wave of these vibrations travel to the eardrum.

The eardrum
vibrates and sends
the vibrations to
three ting bones
in the ear.

The bones amplify the vibration and send it to the cochlea. The cochlea is filled with fluid and tiny hairs.

The hairs bump into each other and an electrical impulse is created

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electrical
is created.

The impulse sends
a message to
the brain via the
auditory nerve
and is understood
as sounds.