Sound

We will learn…

A sound is a thing that can be heard. When objects vibrate a sound is made. The vibration makes the air around the object vibrate. The air vibrations enter your ear and 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 can travel through different objects. For example, if someone is playing music next door, the sounds can travel through bricks in the wall.

When sounds waves reach your ear, they make the eardrum vibrate. Messages are sent to the brain which recognises the vibrations as sounds.

The pitch of a sound is how high or low it is. A screech of a parrot is a high pitch. A growl of tiger is a low pitch. The volume of sound is how loud or quiet it is. If a small amount of energy is used, it creates a quiet sound. If you tap a hammer softly is creates a quiet sounds. If you hit a hammer hard, it creates a loud sound. Amplitude measures how strong a sound wave is. Decibels measure how loud a sound is.

Key vocabulary:

vibrations	Invisible waves that move quickly.
sound waves	Invisible waves that travel through air, water, and solid objects as vibrations.
pitch	How high or low a sound is.
amplitude	A measure of the strength of a sound wave.
energy	The power from sources such as electricity that makes machines work or provides heat.
transmit	To pass from one place or person to another.
decibels	A measure of how loud a sound is.

Investigations:

- Which material would make the best sound proofing?
- Make musical instruments and discover how their pitches differ.

Inspirational Scientists

Walter Lincoln Hawkins- engineer and inventor of the plastic coating for telephone wires

Alexander Graham Bell- inventor of the telephone

Working scientifically

In this topic we develop the following practical skills:

- ✓ Asking relevant questions and using different types of scientific enquiries to answer them
- ✓ Setting up simple practical enquiries, comparative and fair tests
- ✓ Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- ✓ Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions