



# Shadsworth Junior School



## Curriculum

### Year 4 Scheme of Work

**Term: Autumn 2**

**Topic: Science - Sound**

#### Key Skills and Knowledge:

##### Sound

Identify how sounds are made, associating some of them with something vibrating

Recognise that vibrations from sounds travel through a medium to the ear

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.

To investigate and recognise that sounds get fainter as the distance from the sound source increases.

##### Working Scientifically

Ask relevant questions and using different types of scientific enquiries to answer them; make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers; gathering, recording, classifying and presenting data in a variety of ways to help in answering questions; report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.

#### Reading and Writing Opportunities (Long and Short Activities)

##### Creative Ideas and Hooks

Explanation text – how sound travels.

Experiment Write up – String telephone investigation.

WOW – Listen to range of different music styles: rock, classical and opera. Discuss and likes and dislikes.

Use a range of musical instruments to let children practise volume (loudness) and pitch.

Make telephone out of 2 plastic cups and string to investigate how sound travels and becomes weaker the further away it is.

Find the best material to muffle sound, like ear defenders that builders wear on a construction site.

#### Links to PSHCE, Equality and British Values Work

Respecting the environment

Sign language

Deaf awareness

##### Key Vocabulary:

Ear, staples, auditory nerve, canal, malleus, eardrum, cochlea, incus, outer ear, pitch, frequency, volume, sound wave, vibrate

##### Resources Available / Visits/Visitors

Musical instruments (various drums, xylophone, tambourine, wooden sticks, etc.

Plastic cups and string  
Measuring tapes

Data loggers to measure sound

##### Useful Websites:

<https://www.youtube.com?v=AGjxfx8sy6s>

<https://theschoolrun.com/what-is-sound>

<http://www.pbs.org/parents/crafts-for-kids/diy-plastic-cup-phone/>

Previous Knowledge:  
Identify that humans and some other animals have skeletons and muscles for support, protection and movement.

