St Peter's Roman Catholic Primary School

Science Year 4

Summer 1

Sound

What is this topic about? In this topic you will learn about how to describe sounds and how we hear sounds. We will investigate what happens to a sound the further we get from the source, how are sounds created and how sounds travel. In addition, we will explore how sounds can be changed and how we block/muffle sounds.



Pupils might work scientifically by:

- **Finding patterns** in the sounds that are made by different objects such as saucepan lids of different sizes or elastic bands of different thicknesses.
- **Making** ear muffs or something similar from a variety of different materials **to investigate /test** which provides the best insulation against sound.
- **making [create/invent/design]** and playing their own instruments by **using what they have found out** about pitch and volume.

At the end of the Topic I will know…

- A sound produces **vibrations** which travel through a medium from the source to our ears. Different mediums such as solids, liquids and gases can carry sound, but sound cannot travel through a vacuum (an area empty of matter). Vibrations may not always be visible to the naked eye.
- The vibrations cause parts of our body inside our ears to vibrate, allowing us to **hear** (sense) the sound.
- Sounds travel away from their source in all directions.
- Pitch is the highness or lowness of a sound and is affected by features of objects producing the sounds.
- Pitch can be altered either by changing the material, tension, thickness or length of vibrating objects or changing the length of a vibrating air column.

KEY VOCABULARY

Pitch, loudness, vibrate,
vibration, muffle, tuning, quiet, soft,
noise, sound, loudness, loud,
volume, tension, tight,
air, air column, muffle