# St. Mary's Catholic Primary School



**Subject: Science** 

**Topic:** Sound **Year:** 4 **Strand:** Physics

## What should I already know?

- We detect sounds through our ears.
- Sounds can be made quieter and louder.
- There are high and low sounds.



#### What am I going to learn?

- Sounds are made when something vibrates.
- The size of the vibration is called the amplitude. Amplitude is a measure of how loud or quiet a sound is.
- Quieter sounds have a smaller amplitude, and louder sounds have a bigger amplitude.
- Sound can travel through solids, liquids and gases.
- Sound travels as a wave, vibrating the particles in the medium it is travelling in.
- Pitch is a measure of how high or low a sound is. High sounds can be quiet or loud, and low sounds can be quiet or loud too.
- The further the vibrations travel, the more they spread out. As they spread out through more and more particles, the vibrations become smaller. This causes the sound to get quieter.

# **Vocabulary**

**Absorb:** To take in or soak up.

**Fainter:** Lacking brightness, vividness, clearness, loudness, strength, etc.

**Medium:** A substance that makes possible the transfer of energy from one location to another, especially through waves.

**Pitch:** Pitch is how high or low a voice or musical note is.

**Travel:** To travel is to go from one place to another.

**Vibration:** To move quickly from side to side and with small movements.

**Volume:** The strength or power of sound or an amount that has increased.



### **Investigations and activities**

- To identify what materials are suitable for soundproofing.
- To understand how sound travels.
- To create an instrument to be able to make different sounds.