Year 3/4 Science: Sound

Subject Specific Skills

- 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
- Recognise that sounds get fainter as the distance from the sound source increases.

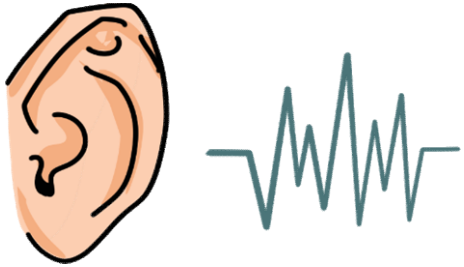
Prior Learning

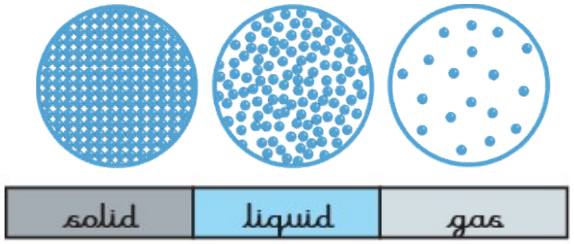
- Sound is not taught as a separate topic in KS1 science however children may have some knowledge of pitch and volume through their music lessons.
- In KS2, children continue to explore sound through music (in their music lessons) and in the topic on light, children may compare how fast sound travels compared to light.

Key Vocabulary

Vibrate/vibrations - forward and backward movement of an object (usually rapidly).
volume - how loud or quiet a sound is.
pitch - how high or low a sound is.
pinna - the outer portion of the ear (ear flap).
cochlea - the sound reception part of the inner ear.
eardrum - the membrane which collects sound from the pinna and passes it to the inner ear.

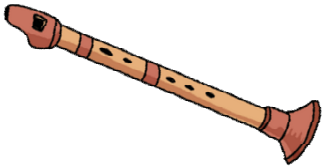
Sounds are made when objects vibrate. The **vibration** makes the air around vibrate, and the air vibrations enter your **ear.** You hear the **vibrations** as **sounds.** You cannot always see the vibrations, but if something is making a **sound,** a part of it is vibrating. The **vibrations** travel in all directions and they don't travel in **straight lines.**





The vibrations caused by the sound can travel through the air **(gas)** but can also travel through **liquids and solids.**

Sounds can be **high** or **low.** We call this the pitch. The pitch of a sound is how high or low the **sound** is. A high sound has a high pitch and a low sound has a low pitch. The pitch of a sound is due to how many times the object **vibrates** each second. The higher the number of vibrations the higher the **pitch.**



We can change the **pitch** of the **sound** we make on different **instruments.**