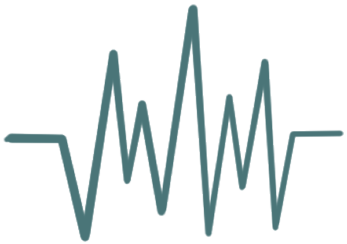
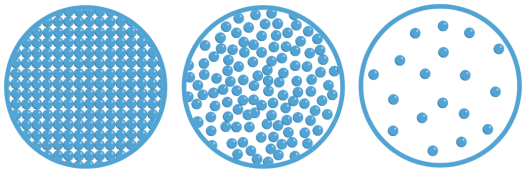
Sound Knowledge Organiser

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.**



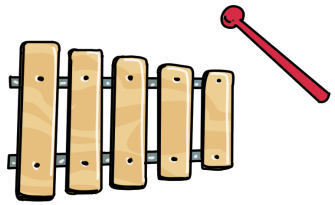


solid	liquid	gas

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

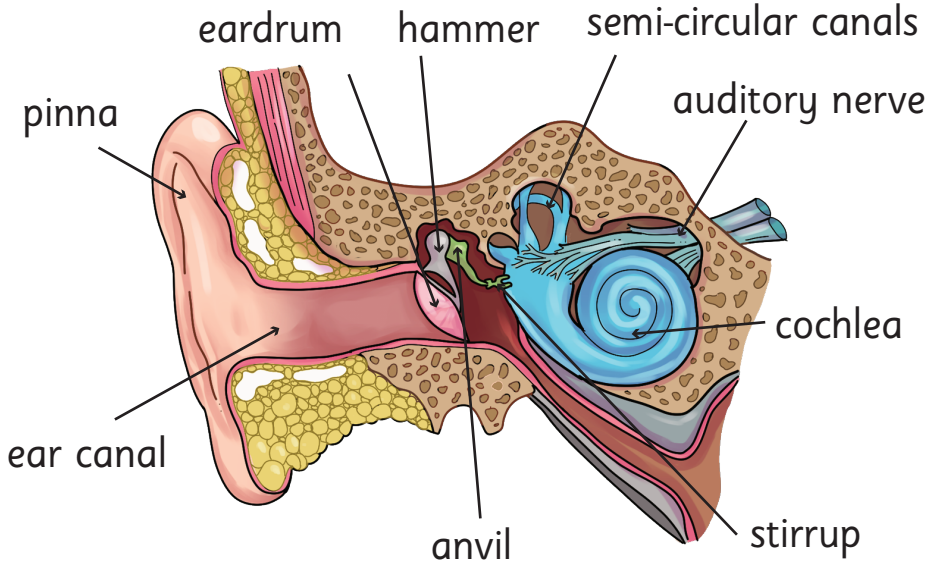
Sounds can be **high** or **low.** We call this the pitch. The pitch of a sound is how high or low the **sound** is. A high sound has a high pitch and a low sound has a low pitch. The pitch of a sound is due to how many times the object **vibrates** each second. The higher the number of vibrations the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

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



Sounds can also be loud or quiet.
We call this the volume or loudness of the sound.

Loudness is the amount of energy in the sound. The energy creates different sized vibrations. If you hit a drum hard, you give it lots of energy and the vibrations will be bigger than if it was hit gently. Bigger vibrations cause louder sounds. Loudness is measured in decibels (dB).



Key Vocabulary

ear - the organ used to hear
noise - a sound - usually unwanted or unpleasant
pinnae - the outside flaps of the ear which help 'catch' the vibrations
pitch - how high or low a sound is
sound - vibrations that travel through the air and other mediums and can be heard
vibrations - very quick movements
volume - how loud or quiet a sound is
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

Interesting Fact!

If you have bigger pinnae, you can hear sounds louder. Try it out! Cup your hands round your ears to make bigger pinnae! Do sounds sound louder?

Did you know?

The stirrup is the smallest bone in the entire human body.