

How can we make different sounds?

What I already know:

Objects, including musical instruments, make different sounds.
We use our ears to hear sounds.
Hearing is one of my five senses.

New knowledge:

- Sound is a type of energy created by vibrations; the louder the sound, the bigger the vibration.
- Sound travels from its source in all directions and we hear it when it travels to our ears.
- Sound travel can be blocked.
- Changing the shape, size and material of an object will change the sound it produces.
- Sound moves through all materials by making them vibrate; changing the way an object vibrates changes its sound.
- Bigger vibrations produce louder sounds, and smaller vibrations produce quieter sounds.
- Faster vibrations (higher frequencies) produce higher pitched sounds.

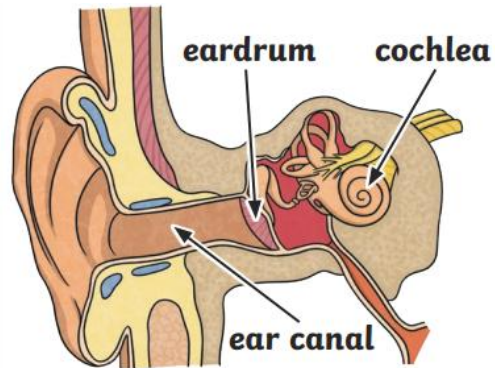
Enquiry questions:

- How are sounds made?
- How does sound travel?
- How can you change the volume and pitch of a sound?
- How do our ears work?
- What happens to sound as it travels?



Scientific skills:

- Observe how sounds are made by vibrations.
- Observe how sounds travel through different mediums.
- Record the volumes created by different-sized vibrations.
- Find links between the pitch of a sound and variations in the sound source.
- Set up an investigation into how sound travels over distance.



amplitude

Vocabulary:

absorb	'Absorb' means to take in or keep inside.
amplitude	Amplitude is a measure of the greatest distance that a vibration moves across and the height of the sound wave it produces.
distance	Distance is a measure of the length between two points.
ear	The ear is an organ that allows humans and animals to hear.
eardrum	The eardrum is the piece of thin, stretched skin inside the ear that is moved by vibrations.
pitch	Pitch is a measure of how high or low a sound is.
soundwave	A sound wave is the movement of energy created by the vibration of a sound source.
vibration	A vibration is a very quick, continuous movement.
volume	Volume is a measure of how loud a sound is.



pitch



Interpreting and communicating results



vibration



Evaluating



Asking questions



Making predictions



Observing and measuring



Setting up tests



Recording data