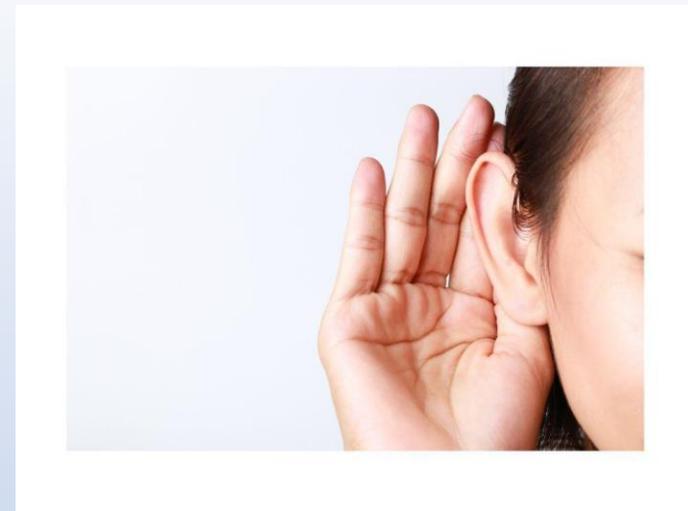


Science

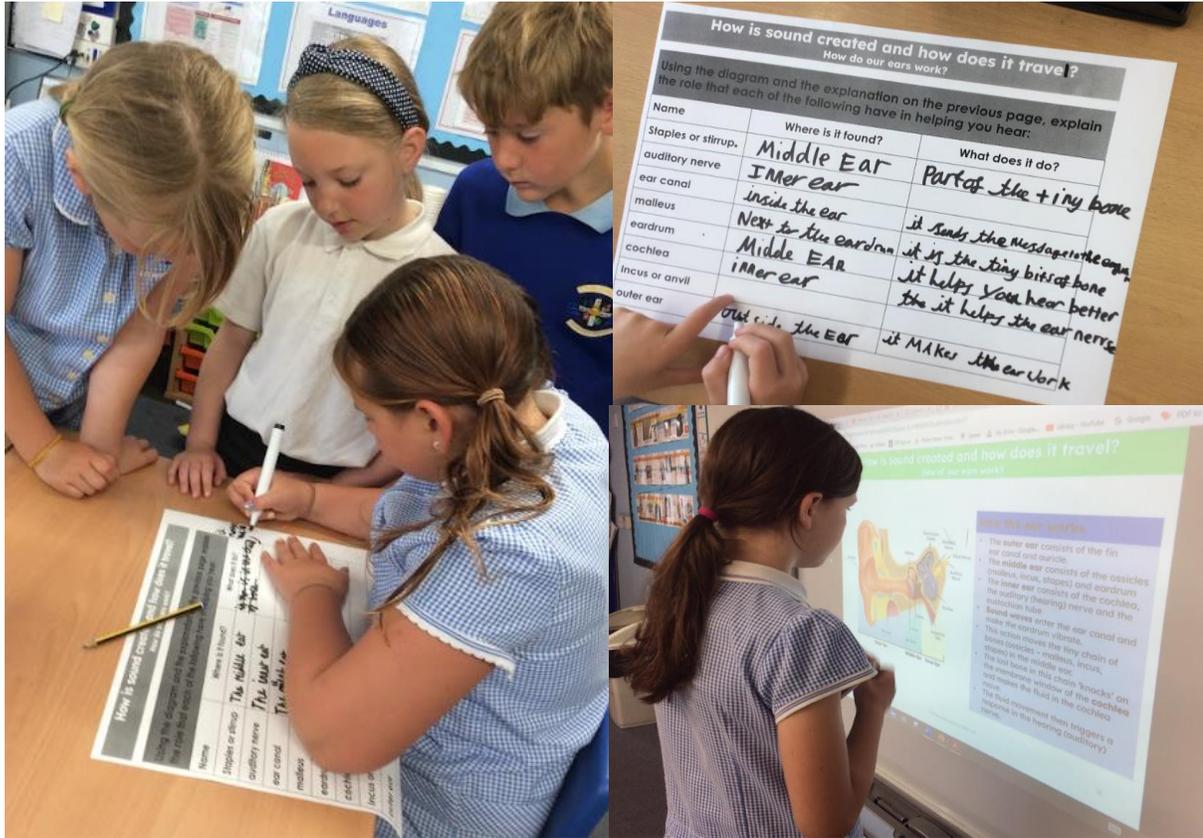
Sound

Class Tamar

Summer 2 2023



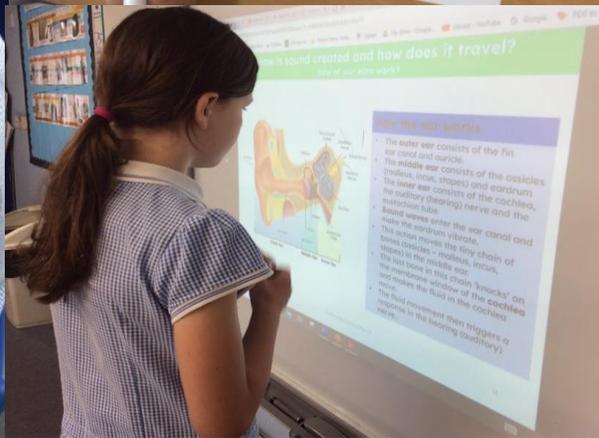
We discussed as a class what we already know about sound. We had a think about the different sounds that we like and dislike and why that might be.



How is sound created and how does it travel?
How do our ears work?

Using the diagram and the explanation on the previous page, explain the role that each of the following have in helping you hear.

Name	Where is it found?	What does it do?
Staples or stirrup.	Middle Ear	
auditory nerve	INNER ear	Part of the tiny bone
ear canal	inside the ear	
malleus	Next to the eardrum	it sends the message to the ear
eardrum	Middle EAR	it is the tiny bits of bone
cochlea	INNER ear	it helps you hear better
incus or anvil		it helps the ear nerve
outer ear	Out side the Ear	it MAKES the ear work

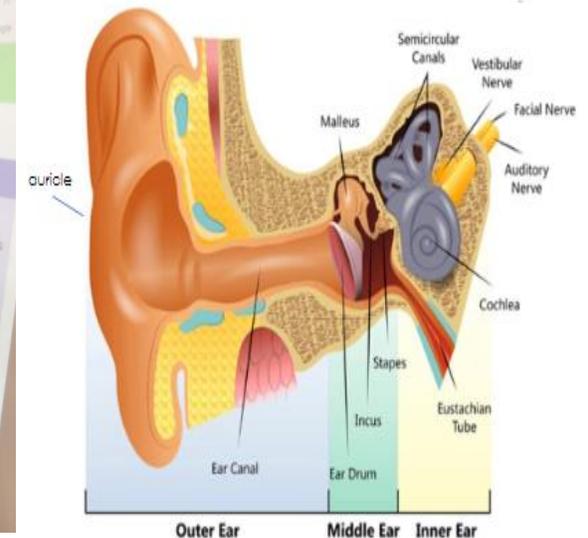
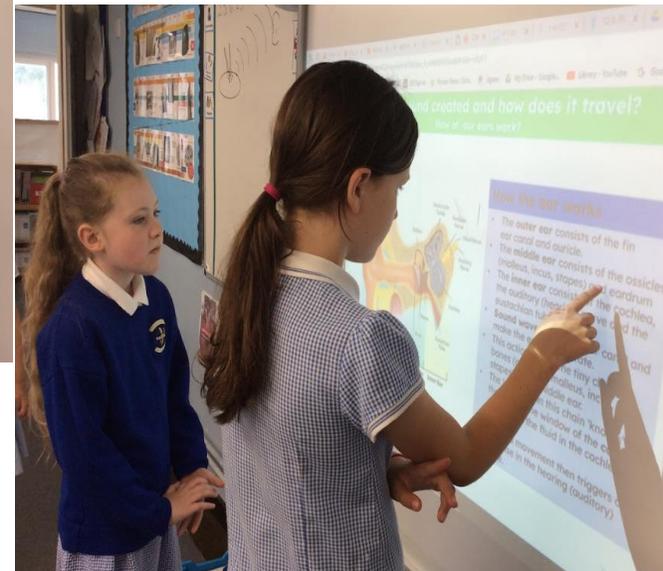


I don't like the sound of screaming, it's too loud!

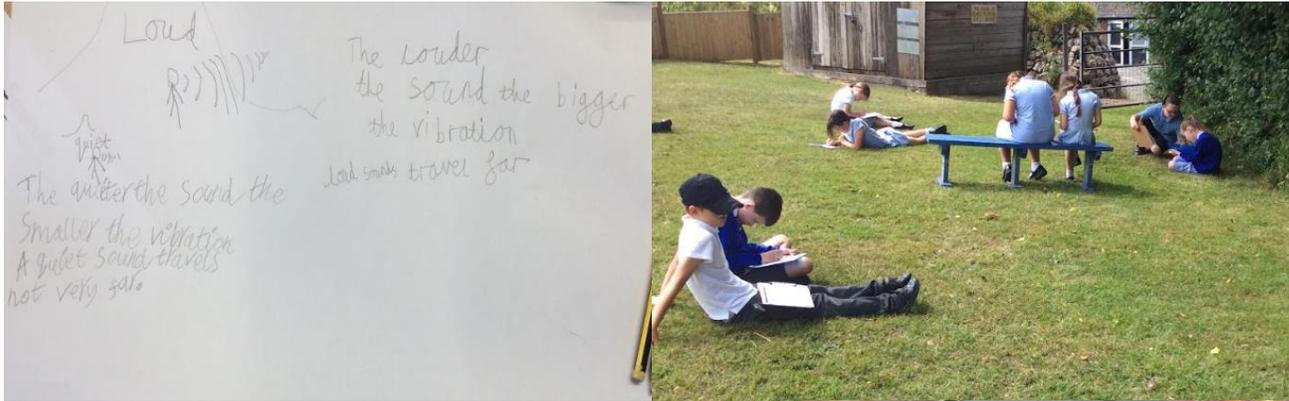
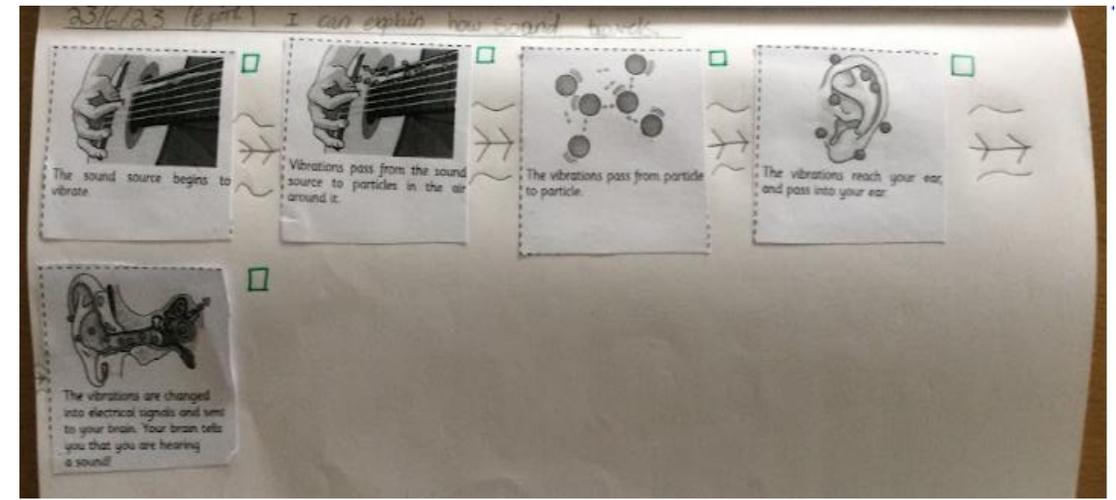
I love the sound of crunching leaves on the floor!

I find the sound of rain really relaxing, it makes me feel sleepy.

We then learnt about the different parts of the ear and the role that each part plays in helping us hear sounds.



We learnt that sound is a vibration. The louder something is the stronger the vibration and bigger the sound waves. The quieter something is the weaker the vibration and smaller the sound waves. We also learnt the sound waves become weaker the further it travels.

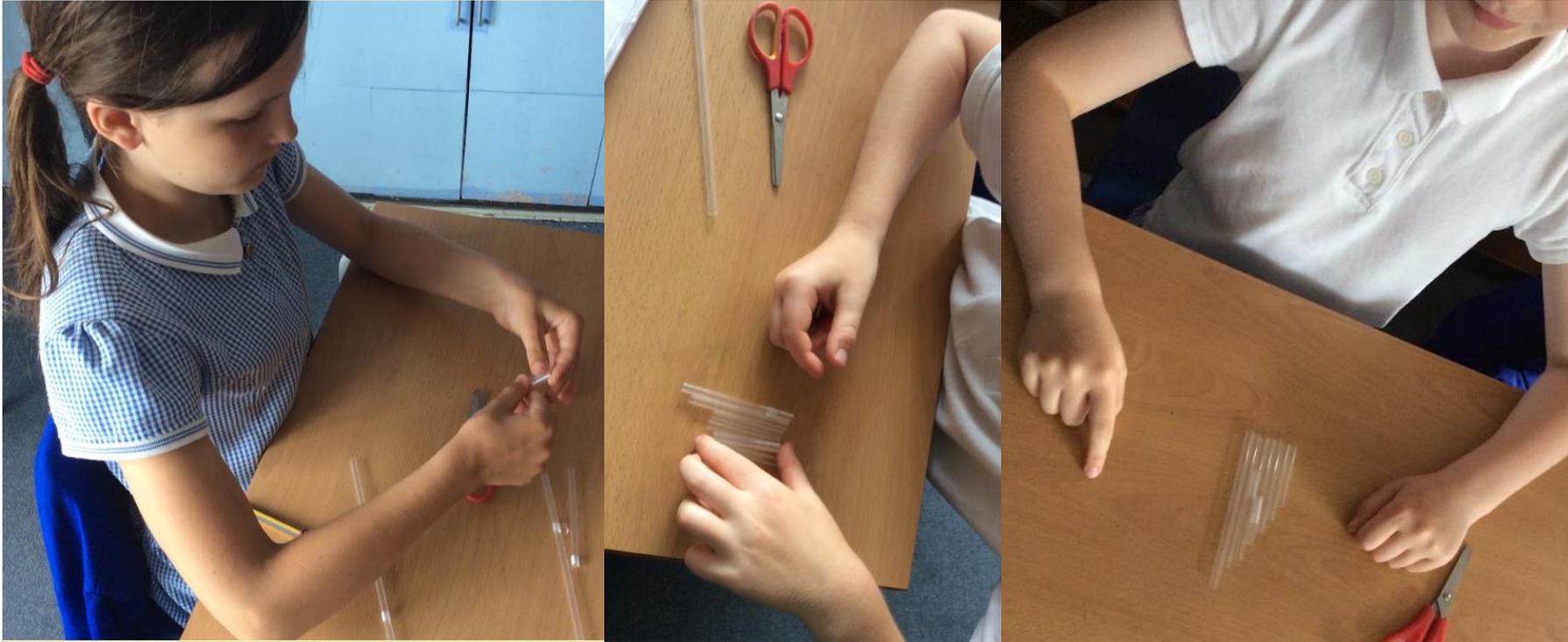


We carefully listened to different sounds around the school and considered where the vibrations were coming from for each sound.

I could hear a car drive past, the vibrations were coming from the car's engine.

I could hear the breeze blowing through the trees, the wind was making the leaves vibrate which made the sound.

We looked at some musical instruments and noticed the correlation between pitch and the size of the object producing a sound. We noticed that the smaller the object the higher the pitch. We then made our own wind instrument that made different pitch sounds.



The bigger the straw the lower the sound is.

The smaller straws make the highest pitch.



We made our own telephones and explained how this works. We then learnt about how corded and mobile telephones work and that Alexander Graham Bell invented the first practical telephone.



We had to keep the string tight so that we could hear each other through the string telephone.

I think its because it would be easier for the sting to vibrate - the sound could travel easier to the other end.



Science Year 4 Knowledge Organiser

Main Learning: Sound

Key knowledge

Know how we get to hear things and how sound is created

Know how sound is made and what happens as sound travels away from its source

Know how sound travels from the source to the ears

Know to associate sound with vibration

Know the correlation between pitch and the object producing a sound

Know the correlation between the volume of a sound and the strength of the vibrations that produced it

Vocabulary

pitch

A high sound has a high pitch and a low sound has a low pitch

volume

Is the perception of loudness from the intensity of a sound wave. The higher the intensity of a sound, the louder it is perceived in our ears

vibrating

Sound is caused by the vibration of a medium (usually air) and it travels in waves

frequency

This is measured as the number of wave cycles that occur in one second

vibrating

Sound is caused by the vibration of a medium (usually air) and it travels in waves

hammer

The ear has little bones called ossicles that help you hear. They are called the hammer (malleus), anvil (incus), and stirrup (stapes). They amplify the sound or make it louder

Personal development:
Awareness of the world around them. Jobs you could do: working within science, music, education.

