

Science 1 - Tuesday 23rd February 2021

Recap

Last week we used observations from investigations to justify that **sound is made when objects vibrate**. The object that makes a sound is called the **source**. Although we cannot always see vibrations, if an object is making a sound, a part of it is vibrating.

When an object vibrates, the vibration makes the air around the object vibrate and the air vibrations then enter your ear. These are called **sound waves**.

Today we will be focusing on how we hear sounds.

WALT: Use scientific vocabulary and labelled diagrams to communicate ideas.

Task 1

Sit in silence for a minute or so. Think about the following.

What sounds can you hear?

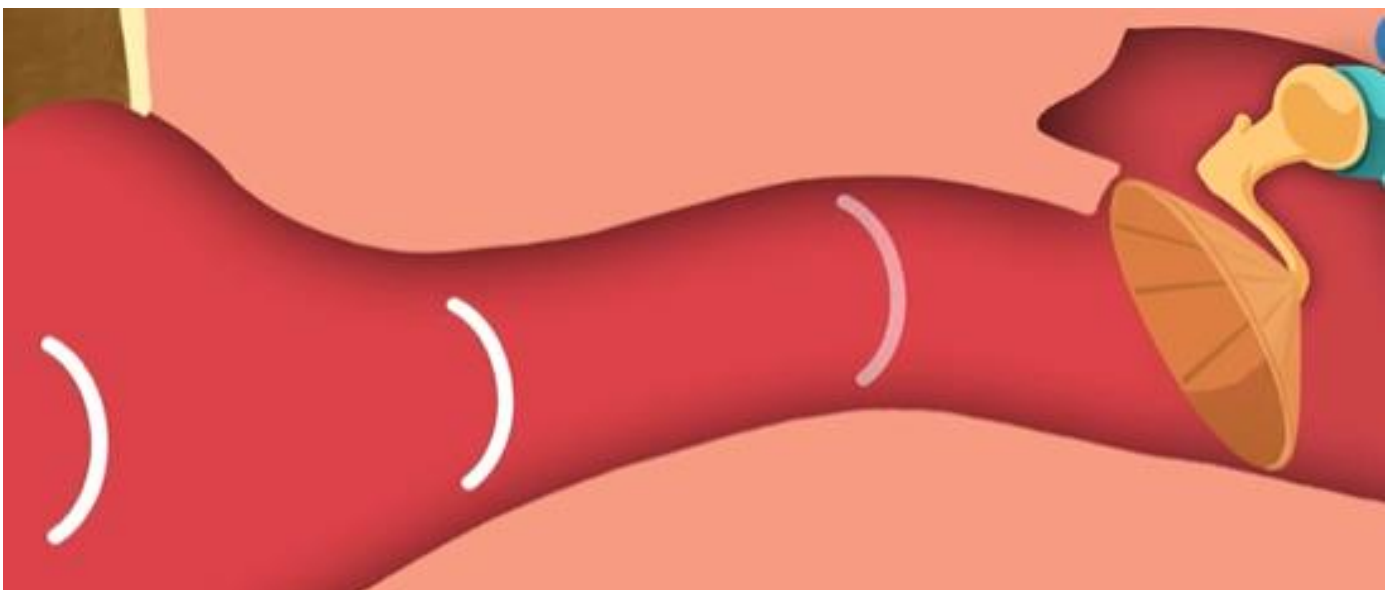
How do you hear them?

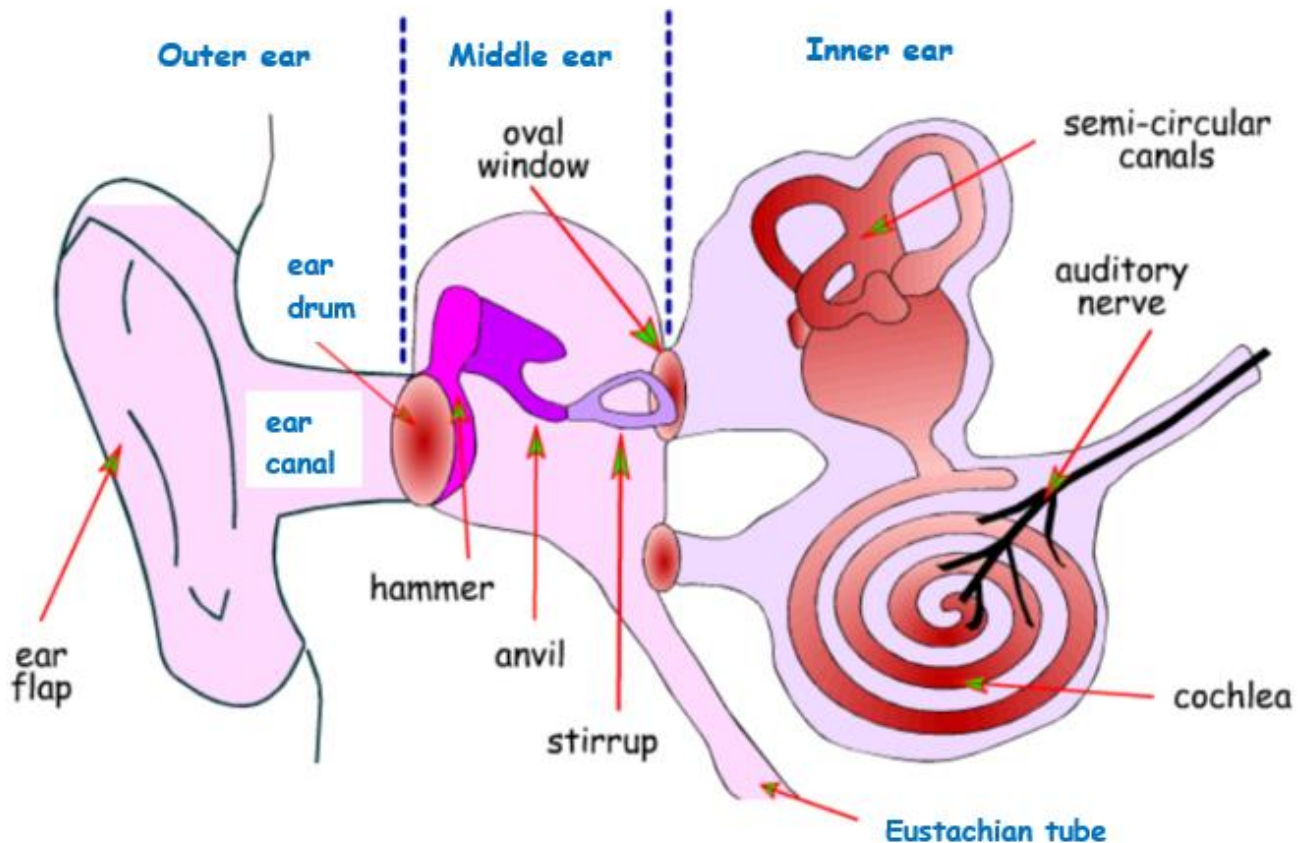
Some sounds are made outside the area in which you are sitting but how does that sound travel to your ears?

Why are some sounds easier to hear than others.

Watch this clip to find out more about how we hear.

<https://kidshealth.org/en/kids/ears-movie.html?WT.ac=en-k-htbw-main-page-b>





This is a picture of a human ear. The words in blue are the ones you will need to learn. The words in black are scientific vocabulary it would be good for you to learn.

Task 2

Using the picture above, order the statements below so they show the path that sound travels from its source to our brains. Check your order by comparing them to the answers on the last page.

The small bones in the middle ear amplify the vibrations.

The auditory nerve takes the signals to the brain

The waves make the ear drum vibrate

The waves travel along the ear canal

The cochlea turns the vibrations into electrical signals.

Sound waves are collected by the outer ear

Task 3

Demonstrate your knowledge by completing the sheet below to show the journey of sound from a source to the human brain. Include everything you have learnt in the lesson today. Use the picture and statements to help you. Make sure you write in your own words.

Send your completed work to your teacher

How we hear

Use the following words to explain how we hear:

Scientific words you could include -

sound, vibrations/vibrate, outer ear, ear canal, ear drum, middle ear, tiny bones (ossicles), inner ear, cochlea, nerve, brain

Introduction

Firstly, _____

Then _____

Next, _____

Finally, _____

Answers to Task 2

Sound waves are collected by the outer ear

The waves travel along the ear canal

The waves make the ear drum vibrate

The small bones in the middle ear amplify the vibrations.

The cochlea turns the vibrations into electrical signals.

The auditory nerve takes the signals to the brain