P4L: TEEP List It!

Think, pair, share: How many examples of vibrating objects making sound can you think of?



Learning outcomes:

LO: To recognise that vibrations from sounds travel through a medium to the ear.

CS - I can label the parts of the ear correctly.

DT - I can define the role of each part of the ear.

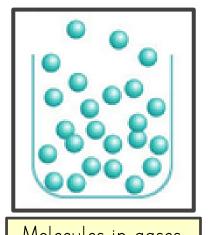
GD - I can create a sketch to aide the understanding of others.

Review:

Think, pair, share: Do you remember how sound can get to our ear?

Without vibrations, there can be no sound. Sound travels through the molecules that make up an object until they reach us.





Molecules in gases.

The vibration of the air molecules around the hands, shake the molecules next to them and so on, until the air molecules in the ear are vibrating.

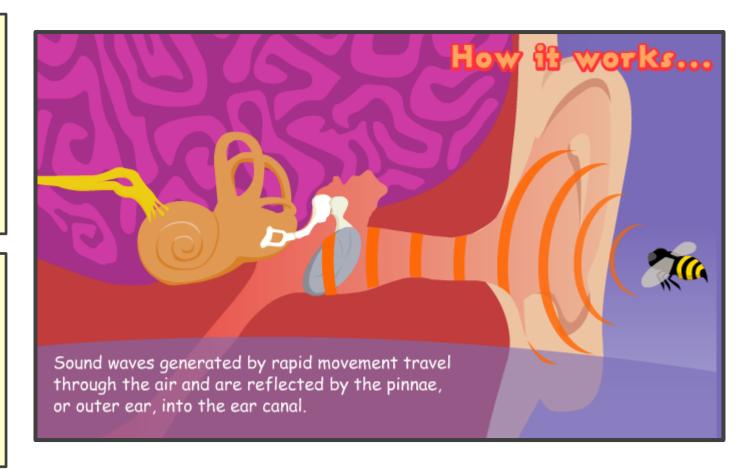
Every time we hear a sound, this process has happened.

Think, pair, share:
Why do we have ears?
- What parts make up the ear?

- - How do they work?

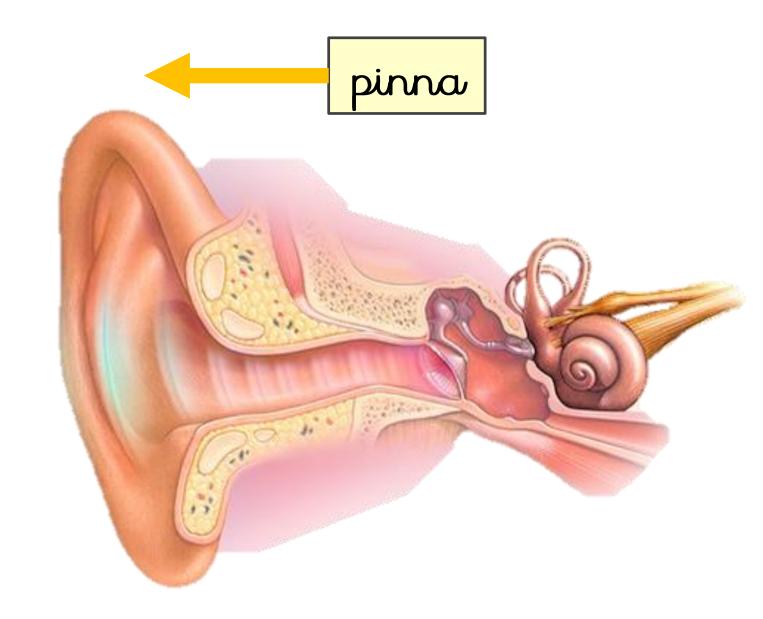
You might like the Manchester Children's University website. Here, you can click through the auditory (hearing) process.

The next slides will explain the process too.

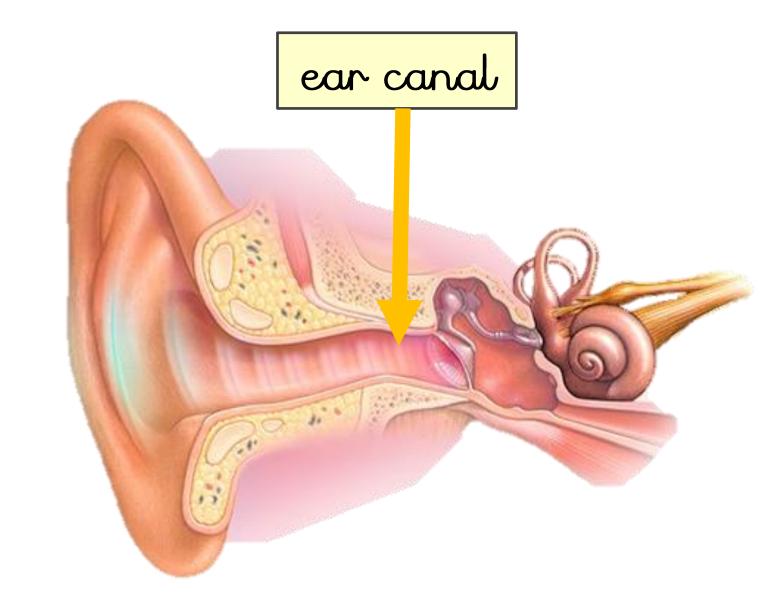


Click the picture above to be taken to the website.

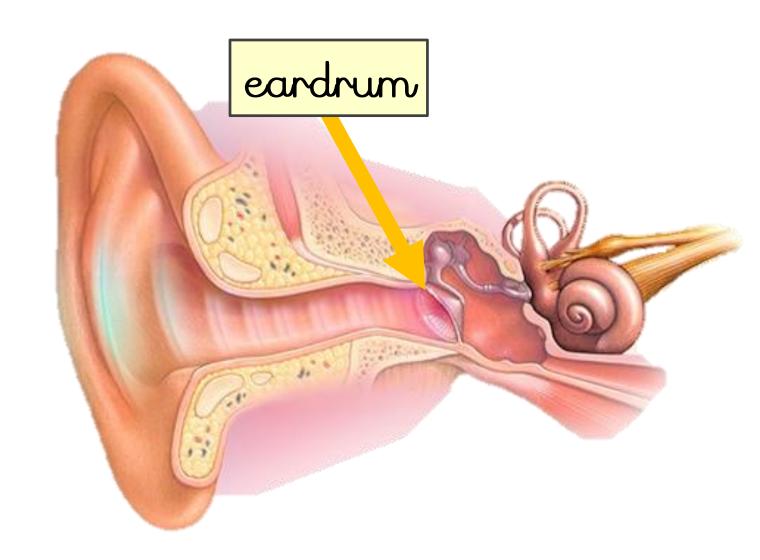
The pinna (also known as the outer ear) is made of cartilage covered by skin. It funnels sound into the ear.



The auditory canal (or ear canal) is a short tube that allows sound to travel and filter into from the pinna through to the eardrum.

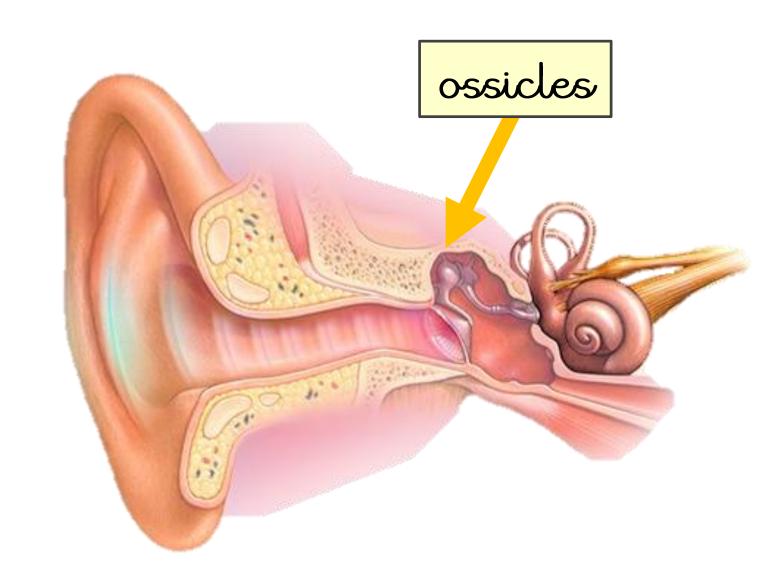


The eardrum is a thin, tough layer of tissue at the end of the auditory canal. Sound waves make the eardrum vibrate.

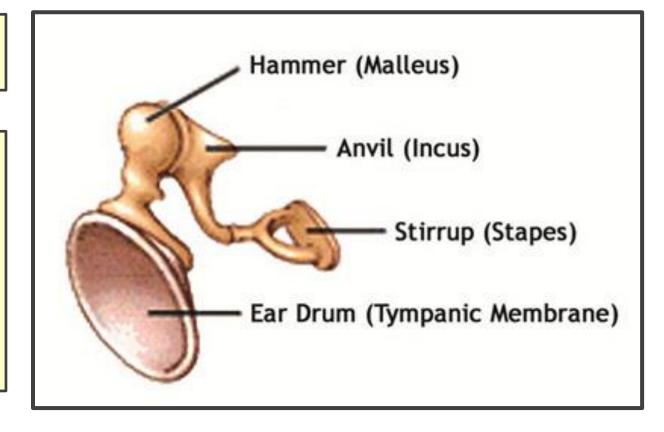


The ossicles, are three tiny bones that amplify and send the vibrations from the eardrum to the cochlea.

Let's take a closer look at these bones.



The first bone is called "the hammer" because it looks slightly like one. Next is "the anvil" and the third bone is called "the stirrup."



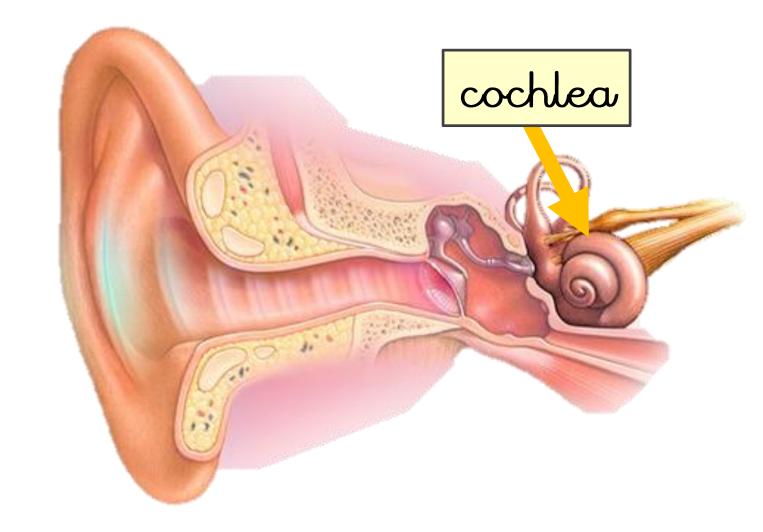
These are the smallest bones in our body!



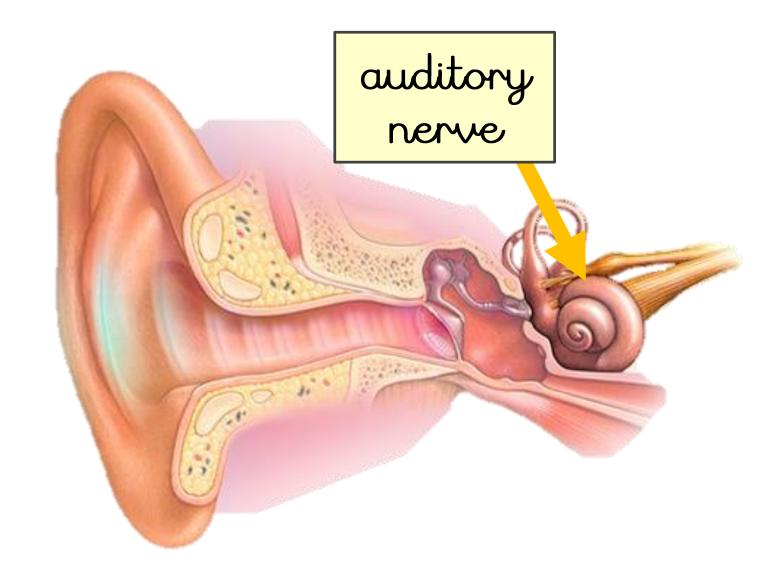


The cochlea is an organ filled with fluid.

Cells inside here change vibrations in the fluid into electrical impulses (messages).

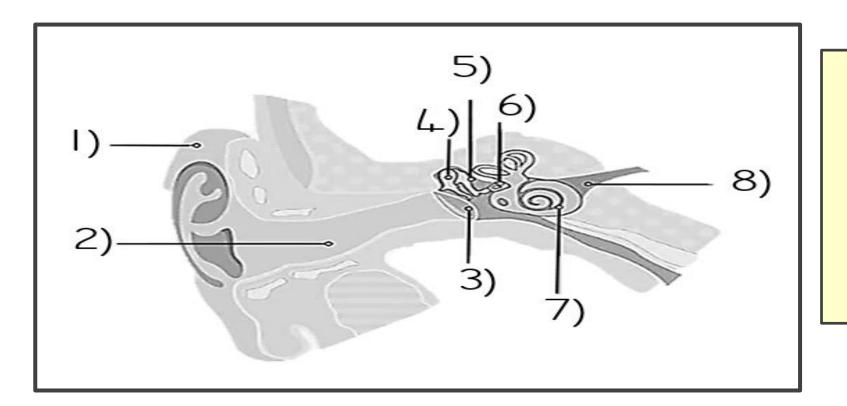


The auditory nerve contains sensory neurons (special nerves) that sends the impulses to the brain so we can understand what we have heard.



Core Skilli

Can you draw and label the ear?



Word bank:

pinna auditory canal
eardrum hammer
anvil stirrup
cochlea auditory nerve

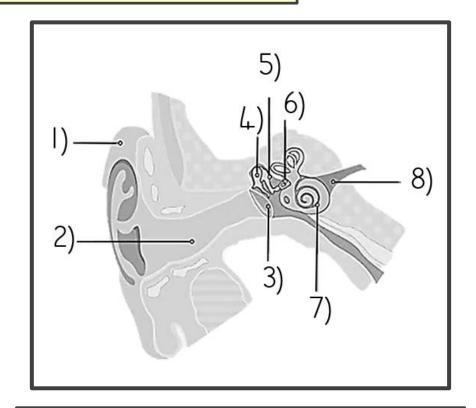
Can you match the part of the ear with its description? Write the correct part of the ear next to the right description and organise them in your book.

The is a thin layer of skin (also known as membrane). Sound waves strike it, causing it to vibrate. These vibrations pass along three tiny bones: the hammer, anvil and the stirrup.
The is a snail-shaped chamber that is fille with liquid and lined with cells. These hairs help to pass on the sound waves.
The carries the information, gathered from the movement of tiny hairs in the cochlea, to the brain where it is interprete as sound.
The is made of folds of skin and cartilage. This helps to collect sound waves and send the sound waves into our head
The allows sound waves to be reflected into your head where it can be transmitted.

Word bank:

auditory canal auditory nerve cochlea eardrum pinna

Answers:

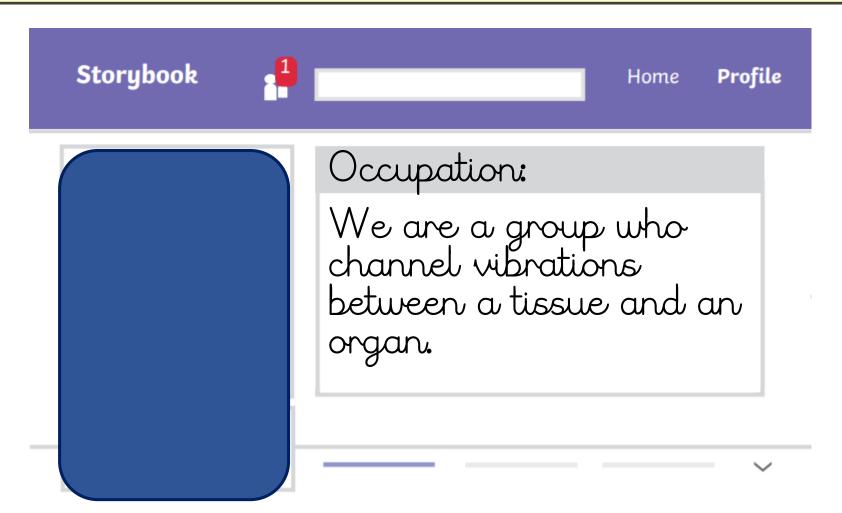


- 1) pinna 2) auditory canal
 - 3) eardrum 4) hammer
 - 5) arvil 6) stirrup
- 7) cochlea 8) auditory nerve

- 1) The pinna is made of folds of skin and cartilage.
 This helps to collect sound waves and send the sound waves into our head.
 - 2) The auditory canal allows sound waves to be reflected into your head where it can be transmitted.
 - 3) The eardrum is a thin layer of skin (also known as a membrane). Sound waves strike it, causing it to vibrate. These vibrations pass along three tiny bones: the hammer, anvil and the stirrup.
 - 4) The cochlea is a snail-shaped chamber that is filled with liquid and lined with cells. These hairs help to pass on the sound waves.
 - 5) The auditory nerve carries the information, gathered from the movement of tiny hairs in the cochlea, to the brain where it is interpreted as sound.

Review:

Think, pair, share: Which part of the ear do you think is being described?



Review:

Think, pair, share: Which part of the ear do you think is being described?

