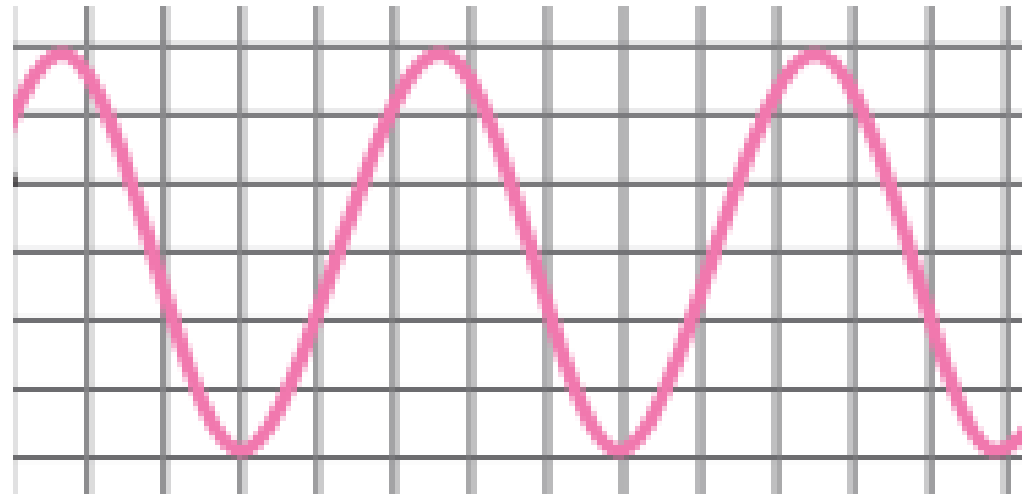


Sound:

Sound is a type of energy. It is created by **vibrations**. The louder the sound, the bigger the vibration and the quieter the sound, the smaller the vibration. Sound can travel through solids, liquids and gases. It travels in waves. Sound needs a **medium** to travel through so cannot travel through a **vacuum**.

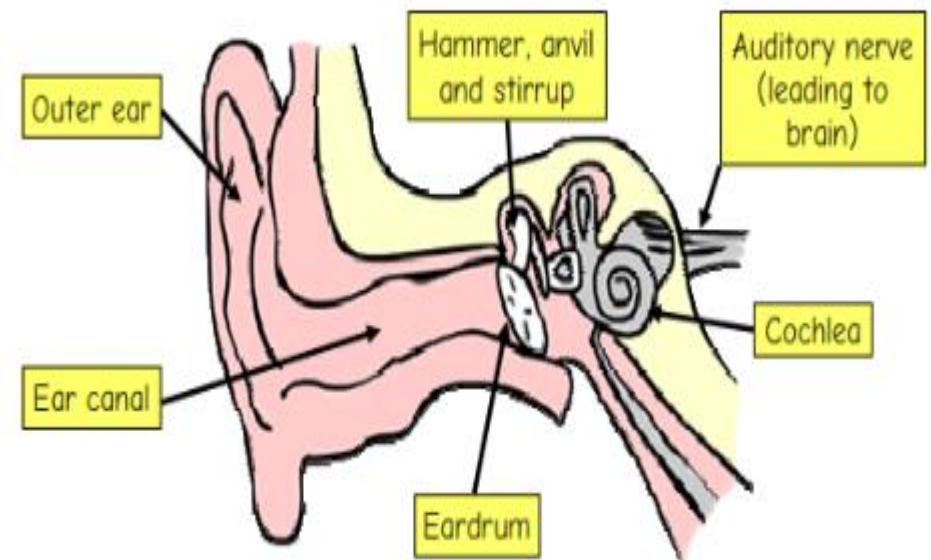


Sound Sources:

A sound source is something that can create vibrations which make sound. There are different types of sound sources: **natural** or **man-made**.

Hearing sound:

We are able to hear sounds by using our ears. The sound travels through the air in a wave until it reaches our ear. Inside our ear, the sound vibrations hit the eardrum and is then passed on to the middle and inner ear. This is then changed into an electrical signal and sent to our brain so that our brain can tell us we are hearing a sound.



Key Vocabulary	
Vibrations	A quick movement back and forth, side to side or up and down.
Medium	A state of matter so a solid, liquid or gas.
Vacuum	A space in which there is no matter e.g. Space
Natural	Something that has not been created by humans. Examples of natural sounds would be waves crashing, birds chirping or volcanic eruptions.
Man-Made	Something that has been made by humans. Examples of man-made sounds are alarm bells and car engines.
Amplitude	The size of a vibration.
Decibels	The unit in which we measure sound.

Volume & Pitch:

The size of a vibration is called the **amplitude**. Louder sounds have a longer amplitude and quieter sounds have a smaller amplitude. The volume of a sound is measured in **decibels (dB)** and can be described as loud or quiet. Pitch is a measure of how high or low a sound is. A whistle being blown creates a high-pitched sound and a rumble of thunder would create a low-pitched sound. Pitch is measured in hertz (Hz).

Noise Pollution:

When there is too much noise, it can disrupt the daily life of a human or animal. Noise pollution can be either natural or man-made but the biggest contributor is man-made machines such as those used for building work!

Scientific Enquiry:

Fair Test- carry out an investigation keeping everything the same and only changing one thing.

Observations- looking carefully for patterns and writing down what you can see.

