

Year 4 Knowledge Organiser - Sound



Sound

Sounds are made when objects vibrate. The **vibration** makes the air around vibrate, and the air vibrations enter your **ear**. You hear the **vibrations** as **sounds**. You cannot always see the vibrations, but if something is making a **sound**, a part of it is vibrating. The **vibrations** travel in all directions and they don't travel in **straight lines**.



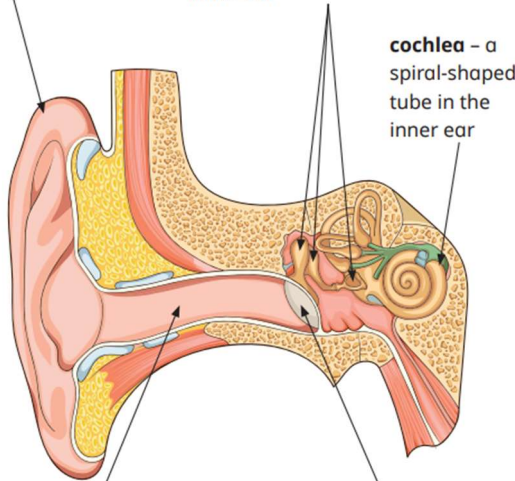
outer ear - the visible part of the ear

ear bones - tiny bones that transfer vibrations from the ear drum to the inner ear

cochlea - a spiral-shaped tube in the inner ear

ear canal - the tube that runs from the outer ear to the ear drum

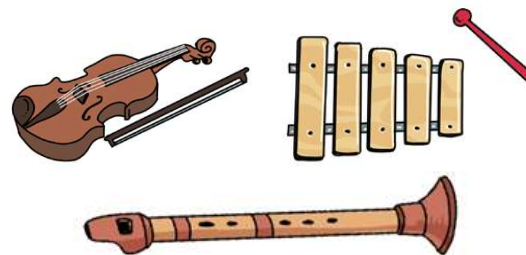
ear drum - a thin layer that can vibrate



Pitch

Sounds can be high or low. We call this the **pitch**. The **pitch** of a sound is how high or low the sound is. A high sound has a **high pitch** and a low sound has a **low pitch**. The pitch of a sound is due to how many times the object vibrates each second. The higher the number of vibrations the higher the pitch.

We can change the **pitch** of the sound we make on different instruments.



#theJSway

Key Vocabulary

vibration - a quick back-and-forth movement

ear - an organ in humans (and many other animals) that detects vibrations, allowing hearing

sound - vibrations that travel through the air, or another medium, and are heard when they reach an ear

volume - how loud or quiet a sound is

pitch - how high or low a sound is

decibel (dB) - a measure of the loudness of a sound

decibel meter - a piece of equipment used to measure the loudness of sound

insulate - to protect something from the transfer of heat, sound or electricity

high-pitched - describes a high sound

low-pitched - describes a low sound