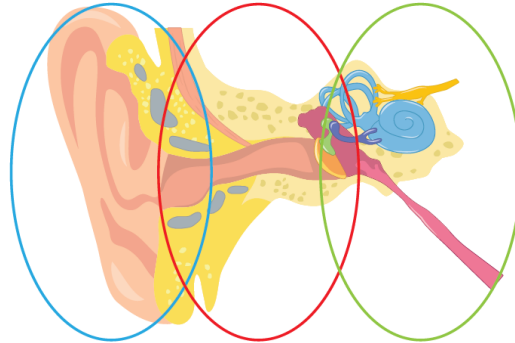




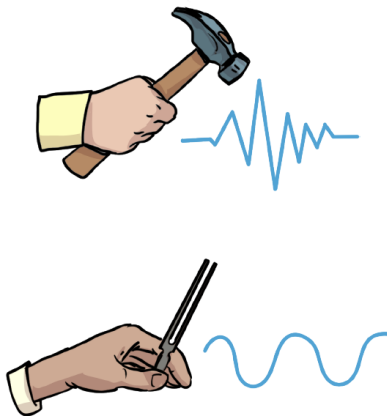
Sound

The ear is divided into three parts. The **inner ear**, **the middle ear** and **the outer ear**.



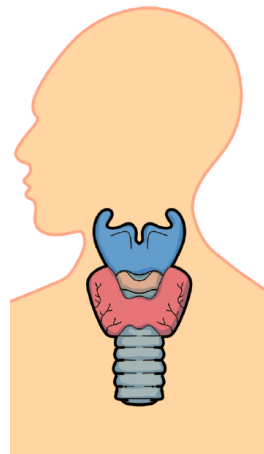
Sounds are made when objects vibrate. The **vibration** makes the air around vibrate, and the air vibrations enter your ear. You hear them as **sounds**.

You cannot always see the **vibrations**, but some part of the object is vibrating if it makes a **sound**.



Everything that makes a **sound** vibrates. When we talk, our vocal cords **vibrate**.

Gently place your hand on your throat and make a **sound**. Can you feel the vibrations?




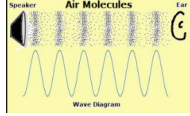
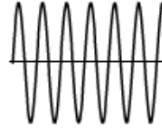
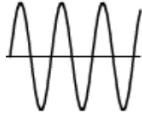

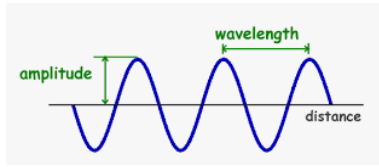
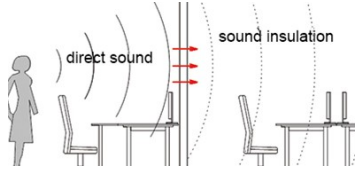
Sounds can also be loud or quiet. We call this the **volume** or loudness of the sound.

Loudness is the amount of **energy** in the sound. The energy creates different sized **vibrations**. If you hit the drum hard, you give it lots of energy, and the **vibrations** will be bigger than if you hit it gently. Bigger vibrations cause louder sounds.

Loudness is measured in **decibels** (dB).



Key Vocabulary

vibration	Tiny, very fast back-and-forth movements. For example, when a musician strums guitar strings, they vibrate.	
sound wave	Vibrating forms of energy that are made of molecules and look like waves.	
high pitch	High-pitched sounds have shorter wavelengths.	
low pitch	Low-pitched sounds have less sound waves.	
volume	How loud or quiet the sound is.	
noise pollution	Sounds that can harm the people and creatures who hear them.	
amplitude	Measure of a sound wave's height.	
sound insulation	The process of taking measures to reduce excess or unwanted sound.	
high frequency	Loud sounds.	
Low frequency	Quiet sounds.	