

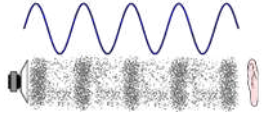
## What should I already know?

Hearing is one of my five senses Y1

Sounds can be combined using musical instruments Y3

What the word *vibration* means Y3

## What will I know by the end of the unit?

What is a sound?	A thing that can be heard. The object that makes the sound is called the <b>source</b> .
How is a sound made?	When objects <b>vibrate</b> , a sound is made. The <b>vibration</b> makes the air around the object <b>vibrate</b> and the air <b>vibrations</b> enter your ear. These are called <b>sound waves</b> . If an object is making a sound, a part of it is <b>vibrating</b> , even if you cannot see the <b>vibrations</b> .
How do sound waves travel?	<b>Sound waves</b> travel through a <b>medium</b> (such as air, water, glass, stone, and brick). For example, if somebody is playing music in the room next door, the sound can travel through the bricks in the wall.
How do we hear sound?	When an object <b>vibrates</b> , the air around it <b>vibrates</b> too. This <b>vibrating</b> air can also be known as <b>sound waves</b> . The <b>sound waves</b> travel to the ear and make the <b>eardrums vibrate</b> . Messages are sent to the brain which recognises the <b>vibrations</b> as sounds. 
How do sound waves change?	<b>Pitch:</b> The <b>pitch</b> of a sound is how <b>high</b> or <b>low</b> it is. A squeak of mouse has a <b>high pitch</b> . A roar of a lion has a <b>low pitch</b> .  <b>Volume:</b> The <b>volume</b> of a sound is how <b>loud</b> or <b>quiet</b> it is. When a sound is created by a little amount of <b>energy</b> , a weak <b>sound wave</b> is created which doesn't <b>travel</b> far. This makes a <b>quiet</b> sound. A <b>vibration</b> with lots of <b>energy</b> makes a powerful <b>sound wave</b> and therefore a <b>loud</b> sound.
How do we measure sound?	<b>Amplitude</b> measures how strong a <b>sound wave</b> is. <b>Decibels</b> measure how <b>loud</b> a sound is. <b>Frequency</b> measures the number of times per second that the <b>sound wave</b> cycles.

## Vocabulary

amplitude	a measure of the strength of a <b>sound wave</b>
decibel	a measure of how loud a sound is
electricity	a form of <b>energy</b> that can be carried by wires and is used for heating and lighting, and to provide power for devices
energy	the <b>power</b> from <b>sources</b> such as <b>electricity</b> that makes machines work or provides heat
frequency	a measure of how many times per second the <b>sound wave</b> cycles
medium	something that makes possible the transfer of <b>energy</b> from one location to another
pitch	how <b>high</b> or <b>low</b> a sound is
sound waves	<b>invisible waves</b> that travel through air, water, and solid objects as <b>vibrations</b>
source	where something comes from
transmit	to pass from one place or person to another
travel	how something moves around
vibrations	<b>invisible waves</b> that move quickly
volume	how <b>loud</b> or <b>quiet</b> a sound is