

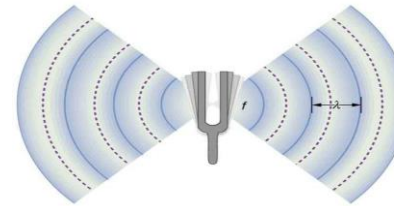
## Year 4 - How do we make sounds?

Science Vocabulary	Definition
Sound	Energy that travels in waves through air, water, or other substances, and can be heard.
Vibration	Movement back and forth.
Pitch	Frequency of a sound wave.
Volume	How loud or quiet the sound is
Insulation	Substance that stops heat, electricity or sound from passing.

Sound is a form of energy like light. Both travel in waves and can be reflected

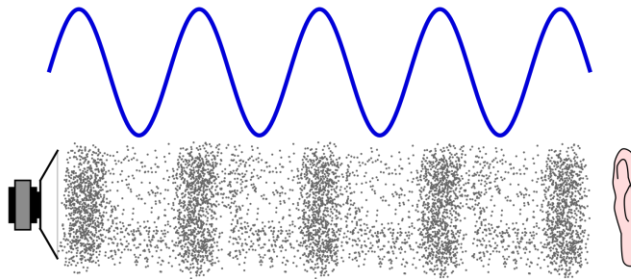
A sound vibration spreads out in all directions from its sources, like ripples from a pond.

Sound is made when something vibrates.



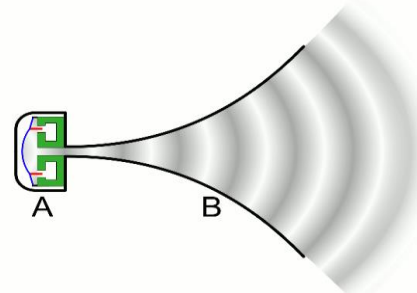
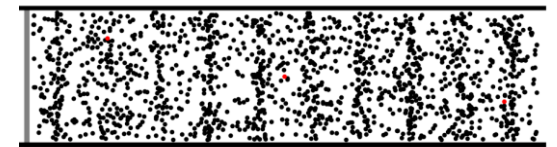
*Vibration* is a rapid back-and-forth movement.

Sound waves are caused by vibrations in the air.



When an object vibrates, it causes movement in the air particles.

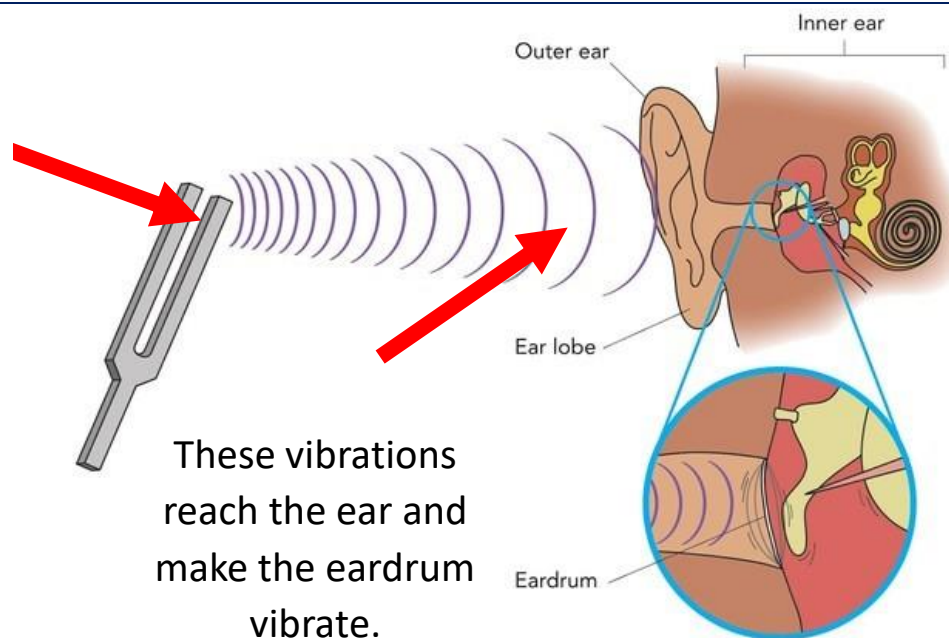
These air particles vibrate too and then bump into other air particles which then start to vibrate and so on.



This continues in waves until the vibrations run out of energy. If the vibrations reach your ears, you will hear the sound.

Particles of air knock into each other.

The vibrations are converted to electrical signals that your brain interprets as sound.



These vibrations reach the ear and make the eardrum vibrate.

The number of vibrations per second is called the frequency of sound.

Sound that has been reflected is called an echo.

Musical Vocabulary	Definition
Pitch	How high or low the sound
Volume	How loud or quiet the sound is.
Beat	The steady pulse of the music like the tick of a clock)
Tempo	The speed of the music

			
quaver	crotchet	minim	dotted minim
$\frac{1}{2}$ a beat	1 beat	2 beats	3 beats



Design



Make



Evaluate



### Big Questions

- What do we mean by truth? Is seeing believing?
- Has technology made the world a better place?
- How does understanding the past help us today/in the future?
- How does music influence the world?

## History Focus: How did the Romans influence the technology we have in Britain today?

Subject Specific Vocabulary	
<b>centurion</b>	Commander of a group of 100 Roman soldiers
<b>emperor</b>	The ruler of the Roman Empire during the imperial period
<b>aqueduct</b>	A large system for carrying water from one place to another
<b>gladiator</b>	An armed combatant who entertained audiences in the Roman Republic
<b>amphitheatre</b>	large, circular open air building used for entertainment
<b>conquer</b>	to overcome and take control of people or land using military force
<b>invade</b>	Enter a place or land with the intention of occupying it.
<b>senate</b>	Similar to the Roman version of our parliament or government
<b>Julius Caesar</b>	Roman leader general and historian
<b>Hadrian's wall</b>	A wall marking the Northern defence fort of the Roman Empire going from coast to coast
<b>Celt</b>	Northern European people who were in Britain when the Romans arrived
<b>Caledonian</b>	People (tribes) living north of Hadrian's Wall in Caledonia (now Scotland).
<b>Boudicca</b>	Celtic Iceni tribal queen who led battles against the Roman invaders.
<b>Fort</b>	A strong building to be easily defended in case of a battle, to house soldiers and control an area.
<b>census</b>	Count of the people in the Roman empire taken every 5 year at the place they were born.



Facts about Romans in Britain	
In 43 AD Emperor Claudius organised a successful invasion of Britain.	
The Romans remained in Britannia (Britain) from 43AD until 410AD when they were needed to fight to defend Rome.	
The Romans were very clean and loved to have a bath. They left bath houses behind and you can still visit the city of Bath today see where they bathed.	
They also brought the technology of central heating to Britain with them and used this to heat their bathhouses and wealthy peoples' huge mansions called villas.	
They mined gold in Wales along with lead and copper. Lead, iron, tin and coal were found in England. These would have been a great source of wealth for the Roman Empire.	
Aqueducts were built to supply fresh clean water and drains, and sewage systems were built to keep the streets and houses clean.	
Many major cities such as London (Londinium), Manchester (Mamucium) and York (Eboracum) were founded by the Romans.	
There was no writing in Britain before the Romans came. They introduced it and it only survived with the help of religion.	
The religion of the Celts and Romans in 43AD was Paganism but they had different Gods; the Celts had to worship both. By 391 AD, Christianity was the official Roman religion, but pagan beliefs were still popular in Britain.	

Exciting Book

What the Romans did for us  
by Alison Hawes

Useful Websites

<http://www.primaryhomeworkhelp.co.uk/Romans.html#3>  
<https://www.bbc.co.uk/bitesize/topics/zqtf34j>  
[https://kids.kiddle.co/Roman\\_Britain](https://kids.kiddle.co/Roman_Britain)  
<https://www.bbc.co.uk/teach/class-clips-video/history-ks2-the-roman-invasion-animation/zmyhf4j>