

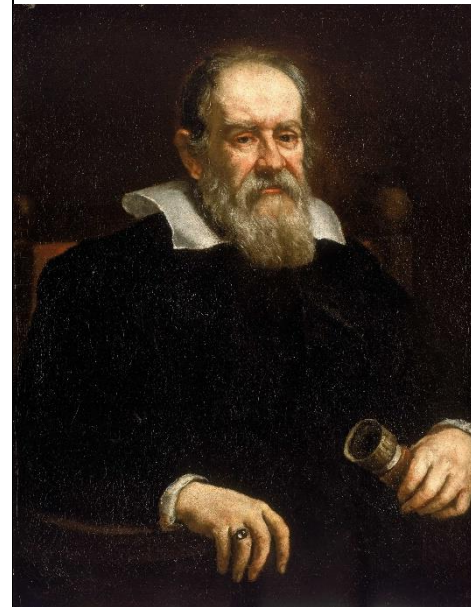
## Key Vocabulary

<b>Vibration</b>	A movement back and forth
<b>Sound waves</b>	Vibrations travelling from a sound source
<b>Volume</b>	How loud a sound is
<b>Amplitude</b>	The size of a vibration – the larger the amplitude, the louder the sound
<b>Pitch</b>	How high or low a sound is
<b>Ear</b>	The organ used for hearing
<b>Soundproof</b>	To prevent sound from passing
<b>Vacuum</b>	A space where there is nothing

## Significant People and Dates

Leonardo Da Vinci

Da Vinci was a famous musician as well as a brilliant scientist! He was interested in the way sound moved through different materials. Da Vinci discovered that sound travelled in waves and was particularly interested in sound waves under water – he discovered this in 1490 when he inserted a tube into water and was able to detect ships and boats by the underwater sound waves.

Galileo

Galileo was an Italian physicist and was the first to record the relationship between the frequency of sound waves, and the pitch of the sound. This was a huge discovery, which followed on from Da Vinci's exploration of sound waves, and impacted the use of musical instruments!

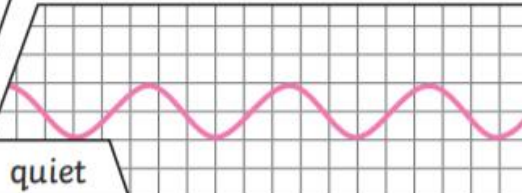
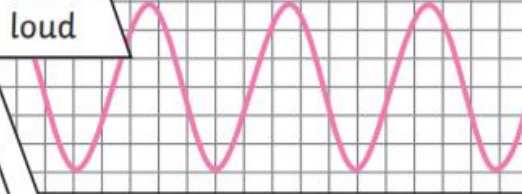
## What Should I Already Know?

Topic not previously covered in the curriculum - Children should know:

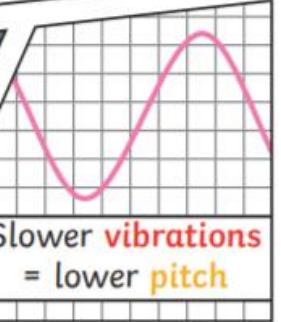
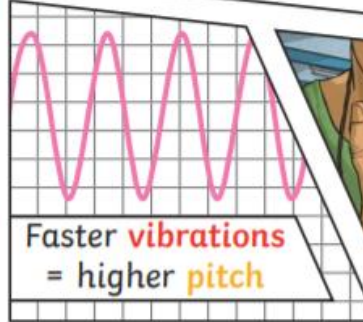
The meanings of basic vocabulary, eg: loud, quiet, fast, slow, low, high, sound, noise etc.

## Important Facts

The size of the **vibration** is called the **amplitude**. Louder sounds have a larger **amplitude**, and quieter sounds have a smaller **amplitude**.

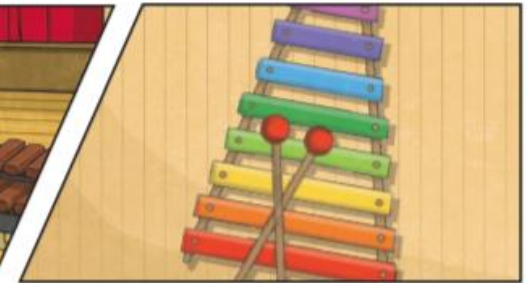


**Pitch** is a measure of how high or low a sound is. A whistle being blown creates a high-**pitched** sound. A rumble of thunder is an example of a low-**pitched** sound.



You can change the **pitch** of a sound in different ways depending on the type of instrument you are playing.

For example, if you are playing a xylophone, striking the smaller bars with the beater causes faster **vibrations** and so a higher **pitched** note. Striking the larger bars causes slower **vibrations** and produces a lower note.



Inside your **ear**, the **vibrations** hit the **eardrum** and are then passed to the middle and then the inner **ear**. They are then changed into electrical signals and sent to your brain. Your brain tells you that you are hearing a sound.

