

SOUND – WOODPECKER CLASS

Key Vocabulary

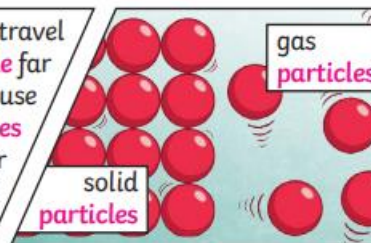
vibration	a quick movement back and forth
sound wave	vibrations travelling from a sound source
volume	how loud a sound is
pitch	how high or low a sound is
amplitude	the size of a vibration – a larger amplitude means the sound is louder
vacuum	a space where there is nothing. There are no particles in a vacuum.

How we hear sounds

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.



Sound energy can travel from **particle to particle** far easier in a solid because the **vibrating particles** are closer together than in other states of matter.



Sound can travel through solids, liquids and gases. Sound travels as a wave, vibrating the particles in the medium it is travelling in. Sound cannot travel through a vacuum.

Pitch 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.

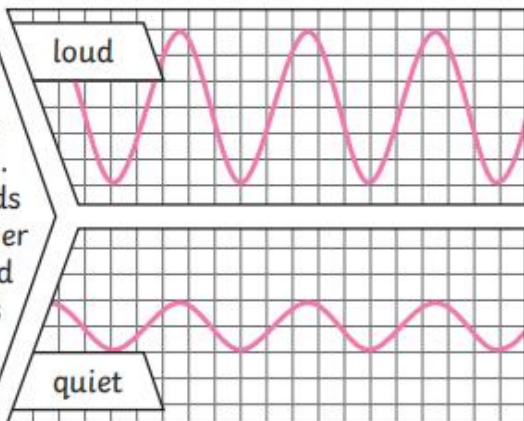
If you throw a stone in a pond, it will produce ripples. As the ripples spread out across the pond, they become smaller. When sound vibrations spread out over a distance, the sound becomes quieter, just like ripples in a pond.



Links to previous learning:

- Materials – particles in solids, liquids, gases

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.

