

Sir John Offley CE VC Primary School
'With God all things are possible'

KS2 Year 4 Sound

Question	Answer
What is sound?	A form of energy.
How is sound generated?	When an object vibrates to produce sound waves which travel through a medium to our ears.
How does sound transfer?	In a longitudinal wave.
Does sound travel through a vacuum?	No.
What is a vacuum?	An area empty of matter (i.e. no particles in it at all).
Can sound travel through water?	Yes.
Can sound travel through air?	Yes.
How do we hear things?	Sound waves cause part of our bodies inside our ears to vibrate, allowing us to hear (sense) the sound.
Does sound travel at the same speed all the time?	No. It travels at different speeds through different objects.
Why do we often hear thunder after we see lightning?	Sound waves travel much slower than light waves. We see lightning as light reaches our eyes before the sound reaches our ears.
What is pitch?	How high or low a sound is.
How is pitch determined?	How many vibrations per second are being made by the vibrating object. The more vibrations, the higher the pitch.
What is frequency?	The number of vibrations per second.
What is volume?	How quiet or loud a sound is.
What is amplitude?	The size of the vibrations.
How is volume determined?	The amount of energy in the wave (strength of vibrations). The stronger the vibrations, the louder the sound.

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How does volume increase?	The strength of the vibration of particles increases.
How does volume change the further away you are from the object?	The volume of sound is quieter if the listener is further away.