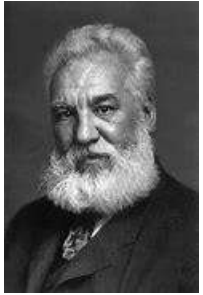




Our Lady's Catholic Primary School – Knowledge Organiser

Science	Sound	Year 4
<p><u>Vocabulary:</u></p> <p><u>Sound</u> – A noise that can be heard when it reaches a person or animal's eardrum.</p> <p><u>Repeating</u> – Something that occurs more than once.</p> <p><u>Continuous</u> – Something that occurs for a duration of time without interruption.</p> <p><u>Strike</u> – To hit something forcibly.</p> <p><u>Amplitude</u> – a measure of the strength of a soundwave.</p> <p><u>Decibel</u> – a measure of how loud a sound is.</p> <p><u>Pitch</u> – how high or low a sound is.</p> <p><u>Sound source</u> – The place from which a sound originates from.</p> <p><u>Sound waves</u> – invisible waves that travel through air, water and solid objects as vibrations</p> <p><u>Vibrations</u> – invisible waves that move quickly</p> <p><u>Volume</u> – how loud or quiet a sound is</p> <p><u>Ear</u> – an organ used for hearing</p> <p><u>Particles</u> – Solids, liquids and gases are made from particles, they are so small we are unable to see them</p> <p><u>Soundproof</u> – To prevent sound from passing.</p> <p><u>Eardrum</u> – A part of the ear which is a thin tough layer of tissue that is stretched out like a drum skin. Sound waves make the ear drum vibrate.</p> <p><u>Fair Test</u> – A test that has all the same variable except 1 in order to answer a scientific question.</p>	<p><u>What should I already know?</u></p> <p>Sound is a type of energy. Sounds are created by vibrations. The louder the sound the bigger the vibration.</p> <p>The louder the sound, the bigger the vibration. You should have noticed that the rice grains vibrated more when you hit the drum harder, creating a louder sound.</p> <p><u>Sticky Knowledge</u></p> <ul style="list-style-type: none"> • Sounds are caused by a material vibrating. • For sounds to travel they require a medium to pass through, which can be a solid, liquid or gas. • We hear/detect sounds because the vibrations produced by the source pass through the air. • When they reach our ears they cause our eardrums to vibrate, stimulating the nerve endings in the ear so we hear the sound. • In space no one would be able to hear you scream because there is 	<p><u>Significant Scientist</u></p> <p><u>Alexander Graham Bell</u></p> <p>Scottish born scientist (1847) who invented the telephone in 1876 at the age of 29. He formed the Bell Telephone Company in 1887.</p> 
	<p><u>Key information</u></p> <p>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.</p> <div> <div> <p>When you hit the drum, the drum skin vibrates. This makes the air particles closest to the drum start to vibrate as well.</p>  </div> <div> <p>The vibrations then pass to the next air particle, then the next, then the next. This carries on until the air particles closest to your ear vibrate, passing the vibrations into your ear.</p>  </div> </div>	