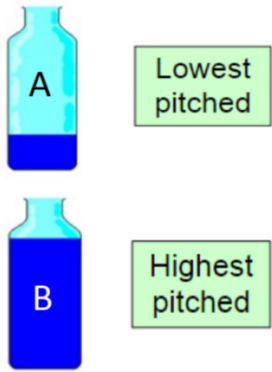
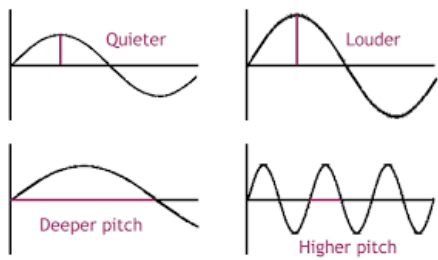
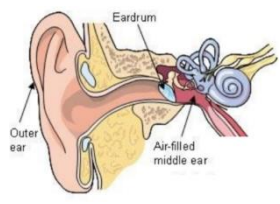




Sound			
Key Knowledge			
Sounds		Diagrams and Symbols	
What is a sound?	A noise that can be heard by someone.	 <p>The shorter the vibrating column of air, the higher the pitch so bottle B will give a higher pitch sound</p>	
How is a sound made?	A sound happens when something vibrates. This can be obvious: Like when a drill is hitting the ground repeatedly which causes a loud noise This can be less obvious: Here the air in the bottle vibrates to produce the noise		
So how do we hear sounds?			
How do sounds travel? Sounds can travel in two ways:	Through the air - like from a TV speaker across the room to your ears Through an object/material - like stone, brick, water and glass. If someone moves furniture upstairs, the sound can travel through the floor to you.	<p style="text-align: center; color: blue; font-size: 1.2em;">Sound Waves</p> 	
How do we hear these vibrations?	The vibrating air hits our ear drums and makes them vibrate.  The vibration is picked up by our brains and converted to sounds we recognise.		
Changing Sounds			
<p style="color: red; font-weight: bold;">Pitch</p> <p>With string instruments, the tighter the string, the higher the pitch of the sound.</p>	<p>The shorter the vibrating object, the higher the pitch of the sound.</p> <p>The longer the vibrating object, the lower the pitch of the sound.</p>	Vibrates	Move continuously very quickly
		Obvious	Clear and easily seen or understood
		Volume	The measure of how loud or quiet a sound is
		Initial	Happening at the beginning
<p style="color: red; font-weight: bold;">Volume</p> <p>The further away we are from the sound source, the quieter the sound will appear.</p>	<p>The closer we are to the sound source, the louder the sound will appear to us.</p> <p>The more energy in the initial vibration the louder the sound will be. For example, if you tap a hammer on a desk the sound will be quiet, but if you smash a hammer on a desk it would be much louder.</p>	Pitch	The pitch is how high or low a sound is
		Material	What something is made from
		Recognise	To see or spot something
		Sound waves	Sound waves travel at 343 m/s through the air and faster through liquids and solids. The waves transfer energy from the source of the sound, e.g. a drum, to its surroundings.
Working scientifically			
<p>How do we hear sounds?</p> <p>How are sounds made?</p> <p>How can sounds be changed?</p> <p>How does sound travel?</p> <p>Can sound travel through different states of matter?</p> <p>How can we change the pitch or volume of a sound?</p>		