





Year 7: ASK Yourself!

Subject: Science

Unit 7.5: Energy transfer and sound

	Launching	Developing	Progressing	Mastering
 S skills				
	<p>I need to use drawings of waves to describe how sound waves change with volume or pitch.</p>	<p>I can partially describe the amplitude and frequency of a wave from a diagram or oscilloscope picture.</p>	<p>I can confidently describe how the energy of an object depends on its speed, temperature, height or whether it is stretched or compressed. I can confidently explain observations where sound is reflected, transmitted or absorbed by different media.</p>	<p>I can expertly explain how energy is dissipated in a range of situations. I can expertly calculate the useful energy and the amount dissipated, given values of input and output energy. I can expertly suggest the effects of particular ear problems on a person's hearing.</p>
 K knowledge				
	<p>I need to know that when energy is transferred, the total is conserved, but some energy is dissipated, reducing the useful energy. I need to know that sound does not travel through a vacuum.</p>	<p>I partially know that sound consists of vibrations which travel as a longitudinal wave through substances. The denser the medium, the faster sound travels.</p>	<p>I confidently know that the greater the amplitude of the waveform, the louder the sound. I confidently know that the greater the frequency (and therefore the shorter the wavelength), the higher the pitch.</p>	<p>I understand how energy is transferred between energy stores in a range of real-life examples.</p>