

P1 – conservation of energy	
A system is .....	An object or group of objects
The 'Law of conservation of energy' tells us.....	Energy can be transferred usefully, stored or dissipated, but cannot be created or destroyed.
Where there are energy transfers in a closed system .....	There is no net change to the <b>total</b> energy
In all system changes energy is <b>dissipated</b> .....	It becomes stored in <b>less useful</b> way (often described as being <b>wasted</b> .)
The higher the <b>thermal conductivity</b> of a material.....	The higher the <b>rate</b> of energy transfer by <b>conduction</b> across the material.
The <b>rate</b> of cooling of a building will be affected by.....	The thickness <b>and</b> the thermal conductivity of its walls.
Efficiency is a way of expressing .....	The proportion of energy that is usefully transferred in a process.
<p><b>You need to be able to recall the TWO equations</b></p> <p style="text-align: center;">Efficiency =</p> <p><b>Units needed be as a decimal or a percentage.</b></p>	$\frac{\text{Useful output energy transfer}}{\text{Total input energy transfer}}$ <p>Or</p> $\frac{\text{Useful power output}}{\text{Total power input}}$
Efficiency of energy transfers can be increased by .....	Oiling/lubricating parts or by the use of thermal insulation.
Efficiency of energy transfers can be increased by .....	Reducing friction

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