

Prior Learning		Every material is made of tiny moving particles (KS3). The similarities and differences between solids, liquids, and gases (KS3). Energy changes and transfers (GCSE Physics unit 1).		
Lesson number	AQA Spec	Title	Lesson outcomes	Assessment
1	4.3.1.1	Density	<ul style="list-style-type: none"> <li>Use the particle model to explain the different states of matter and differences in density.</li> <li>Calculate density.</li> </ul>	
2	4.3.1.1	Required practical: Prac 5 Determine the densities of regular and irregular solid objects	<ul style="list-style-type: none"> <li>To investigate the densities of regular and irregular solid objects and liquids</li> </ul>	<b>Assessment 1:</b> Written assessment 15 Marks  Feedback: Teacher
3	4.3.1.3	Changes of state	<ul style="list-style-type: none"> <li>Describe how, when substances change state, mass is conserved.</li> <li>Describe energy transfer in changes of state.</li> <li>Explain changes of state in terms of particles.</li> </ul>	
4	4.3.2.1	Internal energy	<ul style="list-style-type: none"> <li>Describe the particle model of matter.</li> <li>Understand what is meant by the internal energy of a system.</li> <li>Describe the effect of heating on the energy stored within a system.</li> </ul>	
5	4.3.2.2	Specific heat capacity	<ul style="list-style-type: none"> <li>Understand how things heat up.</li> <li>Find out about heating water.</li> <li>Find out about specific heat capacity.</li> </ul>	<b>Assessment 2:</b> Multiple choice Quiz 25 Marks  Feedback: Auto/Self-assessed

6	4.3.2.3	Latent heat	<ul style="list-style-type: none"> <li>• Explain what is meant by latent heat.</li> <li>• Describe that when a change of state occurs it changes the energy stored but not the temperature.</li> <li>• Perform calculations involving specific latent heat.</li> </ul>	
7	4.3.3.1	Particle motion in gases	<ul style="list-style-type: none"> <li>• Trilogy students do not need to know the content in the last section: Compressing or expanding gases.</li> <li>• Relate the temperature of a gas to the average kinetic energy of the particles.</li> <li>• Explain how a gas has a pressure.</li> <li>• Explain that changing the temperature of a gas held at constant volume changes its pressure.</li> </ul>	
8 TRIPLE ONLY	4.3.3.2	Increasing the pressure of a gas	<ul style="list-style-type: none"> <li>• Describe the relationship between the pressure and volume of a gas at constant temperature.</li> <li>• Calculate the change in the pressure or volume of a gas held at constant temperature when either the pressure or volume is increased or decreased.</li> <li>• Explain how doing work on a gas can increase its temperature.</li> </ul>	
	4.3.3.3			
<b>End of Unit test Assessment: Teacher</b>				
<b>Where we will use these ideas again</b>		P5 – Pressure in a fluid and atmospheric pressure.		