

Chapter and Topic	Lesson	Outcomes	Homework
P6 Molecules and matter	P6 Density	Define density and its units Measure the density of a solid or liquid Rearrange the density equation Predict whether an object will float or sink	Comparison of orders of magnitude.
	P6 Density req prac		Produce a graph of the results
	P6 States of matter	I can define the different properties of solids, liquids and gases. I can describe the arrangement of particles in different states of matter I can analyse what happens when a substance changes state I can evaluate the densities of different states of matter	Challenge: Explain how sweat cools you down in terms of evaporation
	P6 Changes of state	I can define the melting point and boiling point of a substance I can describe what is needed to melt or boil a substance Evaluate the difference between evaporation and boiling Analyse a temperature time graph	
	P6 Internal Energy	describe how temperature changes affect internal energy explain the different properties of gases, solids and liquids analyse pressure in terms of particles	Re-arrange the specific heat capacity equation.
	P6 Specific Latent Heat	1. I can explain what is meant by latent heat 2. I can explain what is meant by specific latent heat of fusion and vaporisation	1. A low voltage heater was used to bring water (in an insulated beaker) to the boil. The beaker is on top of a balance. The reading on the balance decreased from 0.152kg to 0.144kg in the time taken to supply 18400J of energy to the boiling water. Calculate the specific latent heat of vaporisation of water.

		<p>3: I can use specific latent heat in calculations</p> <p>4: I can measure the specific latent heat of ice and water</p>	<p>2. An ice cube of mass 0.008kg at 0°C was placed in an insulated beaker of water at 15°C. The mass of the water in the beaker was 0.12kg. When the ice had melted the temperature of the water was 9°C, the SHC of water is 4200 J/kg°C .</p> <p>a/ calculate the energy transferred from the water</p> <p>b/ Show that when the ice went from 0°C to 9°C it gained 300J of energy</p> <p>c/ Calculate the specific latent heat of fusion of water</p>
	P6 Gas pressure and Temperature	<p>Explain how gas exerts a pressure</p> <p>Explain what the impact of temperature on pressure is</p> <p>Describe the evidence supporting random motion</p>	
Physics only	P6 Gas pressure and motion	<p>explain how changes in pressure affect volume</p> <p>explain what the impact of volume on pressure is</p> <p>Evaluate when to use the equation $pV = \text{constant}$</p>	