

Year 9

Timing	Unit Title	Key Question	Knowledge	Assessing understanding
Autumn	Changes of State and the Particle Model	How are particles arranged in matter and how do they behave?	• Introduction to kinetic theory - particles • Solids, Liquids and Gases • Density theory • How do we measure Density (RP5)	How understanding is assessed Students will be assessed on their ability to: • Recall the knowledge covered • Explain the Physical processes covered. • Interpret graphical and experimental data • Plan and describe valid experiments • Evaluate experimental procedures and results Skills • Description • Explanation • Evaluation • Comparison • Planning and carrying out investigations • Manipulating Mathematical Formulae Assessment point information Based on: • Home works during the term • Test on Solids, Liquids, Gases and Heat Transfer
	Conservation and Dissipation of Energy	How does heat energy transfer?	• Internal energy, conduction and Insulation • Insulation experiment - RP2 • Radiation - absorption, emission and reflection	
	Energy Changes in Systems	What is the Specific Heat Capacity of a substance and how do we measure it?	• Lesley Cube demonstration temperature of different colour surfaces • SHC Theory • SHC Practical • Power and Energy • Changes of State	
Spring	Energy Changes in Systems		• Specific Latent heat • Evaporation	How understanding is assessed Students will be assessed on their ability to: • Recall the knowledge covered • Explain the Physical processes covered.

	Pressure in gases	What does the pressure of a gas depend on?	• Pressure and volume in gases Boyle's law • Pressure and volume in gases experiment • Pressure and Temperature in gases	• Interpret graphical and experimental data • Plan and describe valid experiments • Evaluate experimental procedures and results Skills • Description • Explanation • Evaluation • Comparison • Planning and carrying out investigations • Manipulating Mathematical Formulae Assessment point information Based on: • Home works during the term • Test on Specific Heat Capacity, Latent Heat, Evaporation and Pressure
Further Energy Changes	Further Energy Changes	How does Energy transfer?	• Energy stores and pathways introduction • Kinetic Energy • GPE and converting from it to KE and back	
Summer	Further Energy Changes	How does Energy transfer?	• Stretching a spring and elastic energy • Hooke's Law Required Practical • More about elastic energy • Power and efficiency	How understanding is assessed Students will be assessed on their ability to: • Recall the knowledge covered • Explain the Physical processes covered. • Interpret graphical and experimental data, • Make connections between different areas of understanding. Skills: • Description • Explanation • Evaluation • Comparison • Planning and carrying out investigations

				• Carrying out statistical tests and applying maths formulae Assessment point information Based on: • Home works during the term • End of Year Exam on all topics studied so far.
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