Curriculum Outline 2023-24

Department: Physics

Year 11

Timing	Unit Title	Key Question	Knowledge	Assessing understanding
Autumn	Forces and Motion	How do we describe motion?	 Reaction Times, Thinking, Braking and Stopping Distance Speed, distance and time Distance and Velocity-Time Graphs Solving problems with acceleration and SUVAT equations 	 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
	Forces In Action	How do we represent forces?	 Scalars and Vectors - representing vectors Distance + Displacement Adding Vectors Scale Drawing Resolving Vectors Forces as Vectors and free-body diagrams Resultant forces Weight, gravity 	 Description Explanation Evaluation Comparison Planning and carrying out investigations Manipulating Mathematical Formulae
		How can Forces be used to help?	 Newton 1st, 2nd and 3rd Laws Required Practical 7 - Newton's Second Law Terminal Velocity Satellites in terms of Gravity – circular motion 	 Assessment point information Based on: Home works during the term Possible test in first half term on Electricity Test in second half term on Motion, SUVAT and Scalars and Vectors.

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Spring	Electromagnetism	How can electricity and magnetism be used to help?	 Momentum: Conservation and Change Magnets, Magnetic materials and Magnetic Fields Electromagnetism Electromagnetic Devices The Motor Effect How Motors work Loudspeakers Electromagnetic Induction 1 Electromagnetic Induction 2 Microphones Transformers 1 Transformers 2 	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 experimental data Evaluate experimental procedures and results Skills Description Evaluation Evaluation Comparison Planning and carrying out investigations Manipulating Mathematical Formulae Assessment point information Based on: Home works during the term Mock Exams covering all topics studied so far
Summer	Turning Forces and Pressure		 Centre of Mass / Stability Moments, Levers and gears 	How understanding is assessed Students will be assessed on their ability to: • Recall the knowledge covered

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Revision	Pressure equationAtmospheric Pressure	 Explain the Physical processes covered. Interpret graphical and experimental data Plan and describe valid experiments
		• Evaluate experimental procedures and results Skills
	Revision of all areas.	DescriptionExplanationEvaluation
		 Comparison Planning and carrying out investigations Manipulating Mathematical Formulae
		Assessment point information Based on: • GCSE Exams