



Curriculum Plans – Key Stage 4 Physics

Please find below a detailed outline of the curriculum covered in Physics through Year 10 in Key Stage 4.

Year 10

Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7
Unit 2- Forces and Motion <ul style="list-style-type: none"> • Speed, velocity and acceleration • Motion graphs • Recording motion • Freefall • Forces in balance • Force, mass and acceleration • Friction • Force, weight and gravity • Action and reaction • Momentum • Vectors • Moving in circles 	Unit 3 – Forces and Pressure <ul style="list-style-type: none"> • Forces and turning effects • Centre of mass • More about moments • Stretching and compressing • Pressure • Pressure in liquids • Hydraulic systems • Pressure from the air • Gas pressure and volume • Pressure problems 	Unit 4 – Forces and Energy <ul style="list-style-type: none"> • Work and energy • Energy transformation • Calculating PE and KE • Efficiency and power • Energy for electricity • Energy resources • How the world gets its energy 	Unit 5 - Thermal Effects <ul style="list-style-type: none"> • Moving particles • Temperature • Expanding solids and liquids • Heating gases • Thermal conduction • Convection • Thermal radiation • Liquids and vapours • Specific heat capacity • Latent heat Unit 6 – Waves and Sounds <ul style="list-style-type: none"> • Transverse and longitudinal waves • Wave effects • Sound waves • Speed of sound and echoes • Ultrasound 	Unit 7 – Rays and Waves <ul style="list-style-type: none"> • Light rays and waves • Reflection • Refraction • Total internal reflection • Refraction calculations • Lenses • Electromagnetic waves • Sending and sorting 	Unit 8 - Electricity <ul style="list-style-type: none"> • Electric charge • Electric fields • Current in a simple circuit • Potential difference • Resistance • Ohm's Law • Series and parallel circuits • Electrical energy and power • Living with electricity 	Unit 9 – Revision <p>Revision of Year 10 Physics Units RAG Rating</p> <p>Summative Assessment</p> <p>AFL and self-evaluation</p>
End of Unit Assessment	End of Unit Assessment	End of Unit Assessment	End of Unit Assessment	End of Unit Assessment	End of Unit Assessment	End of Unit Assessment
		Data Average for Autumn Report		Data Average for Spring Report		Data Average for Summer Report
Autumn			Spring		Summer	