



Curriculum Plans – Year 10 – Physics

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

BLOCK	1	2	3	4	5	6	7
Dates	August - September (5 weeks)	October - (4 weeks)	November - December (6 weeks)	January - February (5 weeks)	February - March (6 weeks)	April (4 weeks)	May - June (7 weeks)
Topics	Measurements and units (Unit 1) <ul style="list-style-type: none"> • Review of Unit 1 • Practical skills Forces and motion (Unit 2) <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 • Practical skill 	Forces and pressure (Unit 3) <ul style="list-style-type: none"> • Forces and turning effects • Centre of gravity • More about moments • Stretching and compressing • Pressure • Pressure in liquids • Pressure from the air • Gas pressure and volume • Pressure problems • Practical skills 	Forces and energy (Unit 4) <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 • Practical skills 	Thermal effects (Unit 5) <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 • Practical skills Waves and Sounds (Unit 6) <ul style="list-style-type: none"> • Transverse and longitudinal waves • Wave effects • Sound waves • Speed of sound and echoes • Ultrasound • Practical skills 	Rays and Waves (Unit 7) <ul style="list-style-type: none"> • Light rays and waves • Reflection • Refraction • Total internal reflection • Refraction calculations • Lenses • Electromagnetic waves • Sending and sorting • Practical skills 	Electricity (Unit 8) <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 • Practical skills 	Revision (Revision of Year 10 Units) <ul style="list-style-type: none"> Forces and Motion Forces, Pressure and Energy Thermal Effects Waves, Sounds and Rays • Electricity experiments End of Y10 Assessment Revision of Y10
Assessments	Unit 1 and 2 Assessment	Unit 1-3 Assessment	Unit 1-4 Assessment	Unit 1-6 Assessment	Unit 1-7 Assessment	Unit 1-8 Assessment	End of Y10 Assessment