



Curriculum Plans - Year 10 - Physics - Academic Year 2023/24

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

ВLОСК	1	2	3	4	5	6	7
Dates	28th August - 27th September (5 weeks)	2nd October - 27th October (4 weeks)	6th November - 15th December (6 weeks)	3rd January - 2nd February (5 weeks)	12th February - 22nd March (6 weeks)	2nd April - 26th April (4 weeks)	6th May - 21st June (7 weeks)
Topics	Measurements and units (Unit 1)  Review of Unit 1  Practical skills  Forces and motion (Unit 2)  Speed, velocity and acceleration  Motion graphs  Recording motion  Freefall  Forces in balance  Force, mass and acceleration  Friction  Friction  Force, weight and gravity  Action and reaction  Momentum  Vectors  Moving in circles  Practical skill	Forces and pressure (Unit 3)     Forces and turning effects     Centre of gravity     More about moments     Stretching and compressin g     Pressure     Pressure in liquids     Pressure from the air     Gas pressure and volume     Pressure problems     Practical skills	Forces and energy (Unit 4)  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)  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)  Transverse and longitudinal waves  Wave effects  Sound waves  Speed of sound and echoes  Ultrasound  Practical skills	Rays and Waves (Unit 7)  Light rays and waves  Reflection  Refraction  Total internal reflection  Refraction  Lenses  Electromagnet ic waves  Sending and sorting  Practical skills	Electricity (Unit 8)	Revision (Revision of Year 10 Units) Forces and Motion Forces, Pressure and Energy Thermal Effects Waves, Sounds and Rays • Electricity experiments  End of Y10 Assessment  Revision of Y10
Assessm ents	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