

Kings Curriculum Map

Subject Name

	Autumn Term	Spring Term	Summer Term
Year 9	<p>Electricity (KS3)</p> <p>Particles Kinetic theory, changes of state, density (RP5), conduction and convection.</p> <p>Motion Speed and motion in one dimension, speed of sound, distance time graphs, stopping distances.</p>	<p>Forces Contact and non-contact forces, Weight mass and gravity, Forces and Elasticity (RP6).</p> <p>Energy Energy stores in a system, Energy transfers, Work done, Power.</p> <p>Electricity Circuit symbols and diagrams, Current and charge, Potential difference, Resistance and Ohm's Law (RP3), Series and parallel circuits (RP3).</p>	<p>Waves Transverse and longitudinal waves, properties of waves, wave behaviour (RP8) including refraction, electromagnetic spectrum, applications of electromagnetic waves.</p> <p>Magnetism Magnetic materials, permanent and electromagnets, magnetic fields.</p> <p>Atomic structure Atomic structure, development of atomic model, Rutherford's gold leaf experiment.</p>
Year 10	<p>Forces Scalar and vector quantities, Resultant forces, Scale drawing and calculation to determine resultant forces, Newton's Laws of motion to explain how objects behave when forces act upon them (RP7), Inertia as a concept and how it affects momentum, conservation of momentum.</p> <p>Motion Displacement and velocity as vector quantities, Acceleration as rate of change of velocity, Drawing and interpreting velocity-time graphs.</p>	<p>Energy Conservation of energy, Efficiency, Reducing heat loss by conduction (RP2), Kinetic energy, gravitational potential energy and elastic potential energy calculations.</p> <p>Particles Pressure, Specific heat capacity (RP1), Internal energy, Specific latent heat.</p>	<p>Electricity Series and parallel circuits, Resistance and IV characteristics (RP4), AC supply, Wiring a plug, Energy resources, National Grid.</p> <p>Atomic structure Atomic structure, Decay and nuclear decay equations, Half-life, Contamination and irradiation.</p>
Year 11	PPE Preparation	PPE Analysis	Revision/Exams

	Initial revision of topics and focus on exam technique.	Working on areas of weakness as identified by the PPE and more focus on exam and revision techniques	
Year 12	Measurements and their errors Electricity (RP5, RP6) Particles and Quantum phenomena	Waves (RP1, RP2) Mechanics (RP3) Materials (RP4)	Mechanics Further Mechanics (Circular motion & SHM) (RP7) Capacitors (RP9)
Year 13	Capacitors Gravitational fields Electric fields Magnetic fields (RP10, RP11)	Magnetic fields Nuclear Physics (RP12) Thermal Physics (RP8) Turning points in Physics	Revision