

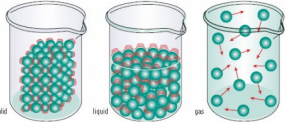

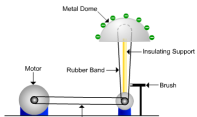

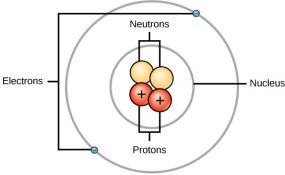

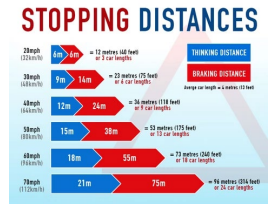
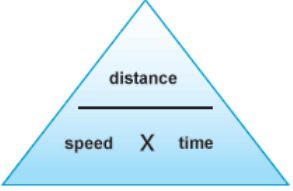
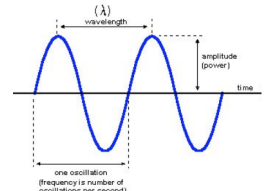
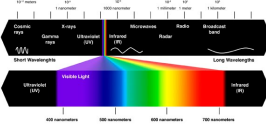
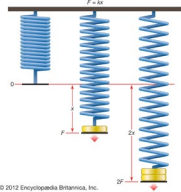
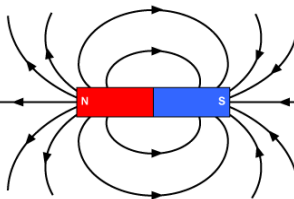
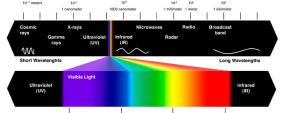
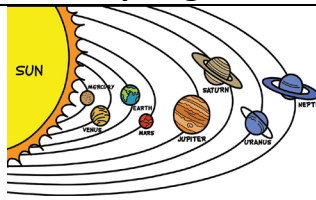
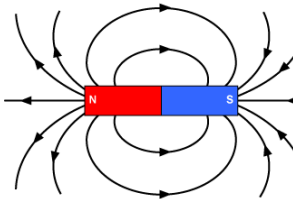



GCSE Physics Curriculum Map 2023-2024

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 9	 <p>Awesome Physics. Maths skills.</p> <p>Energy – Part 1. <u>Energy stores</u> Energy stores and transfers Calculating energy Efficiency <u>Transferring energy Part 1.</u> Energy changes in a system Work and power</p>	 <p>Electricity – Part 1. <u>Introduction to static and current electricity.</u> <u>Current, potential difference and resistance.</u> Circuit symbols Electric current and charge Ohm's Law Required practical 3 Ohmic and non ohmic conductors Required practical 4</p>	 <p>Particle Model of Matter. <u>Changes of state and the particle model.</u> Density Required practical 5 Changes of state <u>Internal energy and energy transfers.</u> Internal energy Specific heat capacity</p>	 <p><u>Internal energy and energy transfers.</u> Changes of state Density Specific latent heat <u>Particle model and pressure.</u> Particle motion in gases Fluid pressure Atmospheric pressure</p>	 <p>Electricity – Part 2. <u>Circuits.</u> Series and parallel circuits AC and DC Mains electricity Electrical power and energy transfers National Grid <u>Static electricity.</u> Static charge Electric fields</p>	 <p>Energy – Part 2. <u>Transferring Heat.</u> Specific heat capacity Required practical 1 Heat transfer Insulation Required practical 2 <u>National and global energy resources.</u> Renewable and non-renewable resources Environmental impact of using different resources.</p>
Year 10	 <p>Atomic Structure. <u>Atoms and isotopes.</u> Atomic structure History of the atom The nuclear model of the atom <u>Atoms and radiation.</u> Activity Properties of radiation Nuclear equations</p>	 <p><u>Atoms and radiation.</u> The randomness of radioactivity Half life Safe use of radiation <u>Hazards and uses of radiation.</u> Background radiation Uses and dangers of radiation <u>Fission and fusion.</u> Nuclear fission Nuclear fusion</p>	 <p>Forces Part 1 – Motion. <u>Describing motion along a line.</u> Distance and displacement Speed Velocity Distance – time graphs Acceleration</p>	 <p><u>Forces and braking.</u> Stopping distance Reaction time Factors affecting braking distance</p>	 <p>Waves Part 1. <u>Waves in air, fluids and solids.</u> Properties of transverse and longitudinal waves Wave equation Required practical 8 <u>Wave behaviour.</u> Reflection Refraction Required practical 9</p>	 <p><u>Sound waves.</u> Sound waves and how we hear Speed of sound measurements <u>Electromagnetic spectrum.</u> Properties of EM waves Uses and dangers of EM waves</p>

GCSE Physics Curriculum Map 2023-2024

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 11	 <p>Forces Part 2. <u>Forces and their interactions.</u> Recap of scalars, vectors and resultant forces Resolving forces Moments <u>Pressure and pressure differences in fluids.</u> Pressure Fluid pressure <u>Forces and motion 2.</u> Equations of motion Terminal velocity Newtons Laws</p>	 <p>Forces Part 2. <u>Forces and braking.</u> Stopping distances Momentum Safety features</p> <p>Magnetism Part 1. <u>Magnetism and electromagnetism</u> Permanent and induced magnets Electromagnets <u>The Motor Effect</u> Flemings left hand rule Electric motors</p>	 <p>Waves Part 2 Lenses Magnification Visible Light <u>Blackbody Radiation</u> Infrared radiation and temperature Required practical 10 Perfect black bodies</p>	 <p>Space Physics Life Cycle of a star The solar system and orbits Red-shift and the big bang Preparation for GCSE</p>	 <p>Magnetism Part 2. <u>Induced Potential</u> Generator effect Generators Loudspeakers & Microphones Transformers</p> <p>GCSE Revision</p> <p>Retrieval practice and examination preparation</p>	 <p>GCSE Examinations</p>

Slight changes to the above structure for this year:

- ❖ Year 10 have started with a Unit 1b – energy resources.
- ❖ Year 11 will complete Unit 4 – atomic structure at the start of the year.