



KS4 Physics – Year 11

	Key content (knowledge)	Key skills	Assessments	Challenge and enrichment
Autumn half term 1	Seismic waves Electromagnetic spectrum Uses of electromagnetic spectrum in communications and medicine Reflection and refraction of light Light and colour Using lenses	Required practical: Investigating the refraction of light. Drawing ray diagrams Comparing uses of parts of the electromagnetic spectrum	End of topic test on waves	Explore the job of a radiographer: Information on being a diagnostic radiographer - Degrees and Courses - NHS Careers (healthcareers.nhs.uk) Build your own solar light bulb: How to Build a SOLAR BOTTLE BULB : 12 Steps (with Pictures) - Instructables
Autumn half term 2	Magnetic fields Current and magnetic fields Electromagnetic devices Motor (ac and dc) Generators Transformers	Applying principles to practical applications Using and rearranging equations.	Mock exams	Explore the National Grid in more detail: Welcome to National Grid Group National Grid Group Find out what steps are being taken to make energy production greener.

Spring half term 1	Formation of the Solar System Life Cycle of a star Orbits and forces Expanding Universe Beginning and Future of the Universe	Research skills Understanding how evidence leads to changes in theories	Magnetic fields	Explore the Nasa website: NASA Or the European Space agency website: European Space Agency (esa.int)
Spring half term 2	Revision for GCSEs	Effective revision strategies Application of knowledge to exam style questions	Mocks	
Summer half term 1	Revision for GCSEs	Revision for GCSEs		
Summer half term 2	GCSE examinations			