

	Year 11 - Physics		
Unit Title	P6 - Waves	P7 -Electromagnetism and Magnets	P8- Space (Separate Physics only)
Approximate Number of Lessons	Trilogy Students – 11 Lessons Separate Students – 18 Lessons	Trilogy Students – 5 Lessons Separate Students – 12 Lessons	Trilogy Students – N/A Separate Students – 7 Lessons
Curriculum Content	<ul style="list-style-type: none"> Describe and compare types of waves Use the wave speed equation Measuring the speed of sound, the frequency, speed and wavelength of waves in water and on a string Measuring the speed of sound Uses of waves Reflection of waves Refraction of waves Lenses (separates only) Radiation (separates only) 	<ul style="list-style-type: none"> Magnetic materials and magnetic fields Current causing magnetic fields Motor effect and Electromagnetic induction Transformers and the National Grid (separates only) 	<ul style="list-style-type: none"> Describe the lifecycle of a star in detail Explain orbital motion Explain the concept of redshift and how it is evidence for the big bang theory
Links to prior learning	<p>Describe sound wave propagation and oscilloscope traces</p> <p>Draw ray diagrams</p> <p>Describe a transverse wave, including how it changes at the boundaries of different mediums</p>	<p>Describe magnetic field lines and the effects of magnetic fields on objects including other magnets</p> <p>An electromagnet uses the principle that a current through a wire causes a magnetic field.</p>	<p>Describe the appearance of planets or moons. Explain why places on the Earth experience different daylight hours and amounts of sunlight during the year.</p> <p>Describe how space exploration and observations of stars are affected by the scale of the universe. Explain the choice of particular units for measuring distance.</p>
Cultural Capital Opportunities	BBC Series – Light fantastic	Science museum https://www.sciencemuseum.org.uk/home	Space museum – Leicester Cambridge University Breckland observatory
Assessment Focus	Waves end of topic assessment	Electromagnetism end of topic assessment	Space end of topic assessment
Name of Knowledge Organiser	P6, P7 and P8 Knowledge organisers are available from Science teachers.		