

Bellerive FCJ Catholic College



Department: Physics (Separates)

Year Group: 11

Bold indicates building on previous knowledge

Term	Learning Focus	Key Knowledge and Skills	Assessment	Challenge and Enrichment
1	Forces Force and motion	<ul style="list-style-type: none"> Develop and understanding for different methods of working out the resultant for from two forces. Develop an understanding of resolving one force into a vertical and horizontal force. Develop and understanding of moments and moments in equilibrium and use equations to calculate the answers to moments questions. Develop an understanding of speed, velocity and acceleration using equations and analysing graphs to answer questions. Develop and understanding for the relationship between force, mass and acceleration. Use equation to answer questions and complete a investigation to show the relationship. Develop and understanding of weight and how to calculate this from mass and gravitational field strength. Develop and understanding of terminal velocity in terms of driving force and resistive force. Develop and understanding of stopping distance and what effects stopping distances. Develop an understanding of momentum, conservation of momentum and impact forces. Use equations to be to answer questions. Develop an understanding for force and elasticity, including Hooke's law and the force and elasticity practical. Develop and understanding for pressure in solids, liquids and the atmosphere. Develop an understanding for upthrust and floatation. 	Force end of topic assessment Y11 March Paper 2 mock	Booklets with additional questions. Physics padlet with links to additional resources GSCE Pod with videos and additional questions Kerboodle for textbook with additional questions.

	Waves	<ul style="list-style-type: none"> • Develop and understanding of the nature and properties of waves. Develop this understanding with practicals about waves on a string and wave in a ripple tank. Use the equations to answer question. Develop understanding of sound waves and use of ultrasound. Develop understanding of seismic waves. Develop understanding and uses of electromagnetic waves. 	Waves end of topic test Y11 March paper 2 mock	Booklets with additional questions. Physics padlet with links to additional resources GSCE Pod with videos and additional questions Kerboodle for textbook with additional questions.
2	Waves Magnetism Space	<ul style="list-style-type: none"> • Develop understanding of infra red absorption and emission and complete practical investigation to reinforce this. Develop understanding of reflection and refraction of light and how refraction is used in lenses. Complete practical on reflection and refraction of light. • Develop understanding of magnets their fields and the field around an electric current. Develop understanding of how electromagnets are used and use equation to answer questions. Develop understanding of the motors and generators and transformers. • Develop and understanding of the life cycle of a star and objects that orbit the Sun and the Earth. Develop and understanding of the big bang and the evidence for it. 	Y11 March paper 2 mock Y11 March paper 2 mock	Booklets with additional questions. Physics padlet with links to additional resources GSCE Pod with videos and additional questions Kerboodle for textbook with additional questions.
3	Review of curriculum	<ul style="list-style-type: none"> • 		Booklets with additional questions. Physics padlet with links to additional resources GSCE Pod with videos and additional questions Kerboodle for textbook with additional questions.