

Yr10 Sep (KS4)	Topic Area	Key knowledge/skills (what has to be learnt)	Examples of key compulsory practicals for students	Knowledge/Skills revisited and to be revisited	What does good look like?	Resources/support at home
P4	Electric circuits	<p>How to calculate the flow of charge</p> <p>How to work out the resistance and potential difference in an electric circuit</p>	<p>Investigating resistance</p> <p>Investigating different electrical components</p>	<p>KS3 Content revisited: Potential difference and resistance, Current</p>	<p>Please see the published checklists on the website. For students to be assessed to have 'mastered' the curriculum they should be competent in the Aiming for 6 criteria. Students who have progressed beyond mastery are competent in many aspects of the Aiming for 8 criteria.</p>	<p>Kerboodle</p> <p>Google classroom</p> <p>BBC Bitesize</p> <p>My GCSE Science</p>
P5	Electricity in the home	<p>How mains electricity differs from the electricity supplied by batteries</p> <p>How to calculate the power of an electrical appliance</p>				<p>Kerboodle</p> <p>Google classroom</p> <p>BBC Bitesize</p> <p>My GCSE Science</p>
P7	Radioactivity	<p>How an unstable nucleus changes when it becomes stable and why the radiation it gives out is harmful</p>				<p>Kerboodle</p> <p>Google classroom</p> <p>BBC Bitesize</p> <p>My GCSE Science</p>
P8	Forces in balance	<p>The difference between a vector and a scalar and how to represent a vector</p> <p>How to find the resultant of two forces and to resolve a force into perpendicular components</p>		<p>KS3 Content revisited: Contact forces, gravity</p>		<p>Kerboodle</p> <p>Google classroom</p> <p>BBC Bitesize</p> <p>My GCSE Science</p>
P9	Motion	<p>The difference between speed and velocity and what is meant by acceleration</p>		<p>KS3 Content revisited: speed</p>		<p>Kerboodle</p> <p>Google classroom</p> <p>BBC Bitesize</p> <p>My GCSE Science</p>

Yr11 SEPARATE	Topic Area	Key knowledge/skills (what <u>has</u> to be learnt)	Examples of key compulsory practicals for students	Knowledge/Skills revisited and to be revisited	What does good look like?	Resources/support at home
P10	Forces and motion	<p>What is meant by terminal velocity and why objects fall through water at a constant velocity</p> <p>What is meant by the conservation of momentum and when we can use the rule.</p> <p>How to measure the stiffness of a spring and what is meant by elasticity.</p> <p>How to calculate the weight on an object from its mass and the gravitational field strength of where it is.</p>	<p>Investigating force and extension</p> <p>Investigating forces and acceleration</p>		<p>Please see the published checklists on the website. For students to be assessed to have 'mastered' the curriculum they should be competent in the Aiming for 6 criteria. Students who have progressed beyond mastery are competent in many aspects of the Aiming for 8 criteria.</p>	<p>Kerboodle</p> <p>Google classroom</p> <p>BBC Bitesize</p> <p>My GCSE Science</p>
P11	Forces and pressure	<p>How to calculate pressure in different situations and relate this to upthrust.</p>		KS3 Content revisited: pressure		<p>Kerboodle</p> <p>Google classroom</p> <p>BBC Bitesize</p> <p>My GCSE Science</p>
P12	Wave properties	<p>Consider the different types of waves and their interactions.</p>		KS3 Content revisited: Wave effects, wave properties, sound, light		<p>Kerboodle</p> <p>Google classroom</p> <p>BBC Bitesize</p> <p>My GCSE Science</p>
P13	Electromagnetic waves	<p>How are the different sections of the electromagnetic spectrum utilised in today's world</p>				<p>Kerboodle</p> <p>Google classroom</p> <p>BBC Bitesize</p> <p>My GCSE Science</p>
P14	Light	<p>What we mean by refraction of waves when they cross a boundary between different substances.</p>	<p>Investigating the reflection and refraction of light</p>			<p>Kerboodle</p> <p>Google classroom</p> <p>BBC Bitesize</p> <p>My GCSE Science</p>

P15	Electromagnetism	How the strength of a magnetic field is measured and what a solenoid is. How an electric motor and an electric generator work.		KS3 Content revisited: Electromagnets		Kerboodle Google classroom BBC Bitesize My GCSE Science
P16	Space (taught as a remote unit and reviewed when returning to school after the summer due to lack of time in present course)	Life cycles of stars, solar systems and our universe. How satellites stay in their orbit and what we mean by a geostationary satellite		KS3 Content revisited: The Universe		Kerboodle Google classroom BBC Bitesize My GCSE Science