

Yr10 Sep (KS4)	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
P4	Electric circuits	How to calculate the flow of charge How to work out the resistance and potential difference in an electric circuit	Investigating resistance Investigating different electrical components	KS3 Content revisited: Potential difference and resistance, Current	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.	Kerboodle Google classroom BBC Bitesize My GCSE Science
P5	Electricity in the home	How mains electricity differs from the electricity supplied by batteries How to calculate the power of an electrical appliance				Kerboodle Google classroom BBC Bitesize My GCSE Science
P6	Molecules and matter	How different states can be described using a particle model. How latent heat can be used to calculate the energy required for state change. How the properties of pressure, volume and temperature are related in a gas.	Calculating density	KS3 Content revisited: Particle model, heating and cooling		Kerboodle Google classroom BBC Bitesize My GCSE Science
P7	Radioactivity	How an unstable nucleus changes when it becomes stable and why the radiation it gives out is harmful				Kerboodle Google classroom BBC Bitesize My GCSE Science
P8	Forces in balance	The difference between a vector and a scalar and how to represent a vector How to find the resultant of two forces and to resolve a force into perpendicular components		KS3 Content revisited: Contact forces, gravity		Kerboodle Google classroom BBC Bitesize My GCSE Science

Yr11 SEPARATE	Topic Area	Key knowledge/skills (what <u>has to be learnt</u>)	Examples of key compulsory practicals for students	Knowledge/Skills revisited and to be revisited	What does good look like?	Resources/support at home
P8	Forces in balance	The difference between a vector and a scalar and how to represent a vector How to find the resultant of two forces and to resolve a force into perpendicular components		KS3 Content revisited: Contact forces, gravity	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.	Kerboodle Google classroom BBC Bitesize My GCSE Science
P9	Motion	The difference between speed and velocity and what is meant by acceleration		KS3 Content revisited: speed		Kerboodle Google classroom BBC Bitesize My GCSE Science
P10	Forces and motion	What is meant by terminal velocity and why objects fall through water at a constant velocity What is meant by the conservation of momentum and when we can use the rule. How to measure the stiffness of a spring and what is meant by elasticity. How to calculate the weight on an object from its mass and the gravitational field strength of where it is.	Investigating force and extension Investigating forces and acceleration			Kerboodle Google classroom BBC Bitesize My GCSE Science
P11	Forces and pressure	How to calculate pressure in different situations and relate		KS3 Content revisited: pressure		Kerboodle Google classroom

		this to upthrust.				BBC Bitesize My GCSE Science
P14	Light	What we mean by refraction of waves when they cross a boundary between different substances.	Investigating the reflection and refraction of light	KS3 Content revisited: Wave effects, wave properties, sound, light		Kerboodle Google classroom BBC Bitesize My GCSE Science
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