

Year 12	Term 1 & Term 2 (two units to be taught side-by-side)		Term 3
Unit Title	Unit 2 Practical Scientific procedures and techniques	Unit 1 Principles and application of Science 1	Unit 3
Approximate Number of Lessons	26	23	14
Curriculum Content	Laboratory equipment and its calibration Preparation and standardisation of solutions using titration Colorimetry Assignment A Thermometers Cooling curves Assignment B Chromatographic techniques and Application of chromatography Interpretation of a chromatogram Assignment C Personal responsibility, Interpersonal skills, Professional practice Assignment D	Structure of atoms Bonding Reacting masses Periodic table Physical properties of elements Chemical properties of elements Cell structure and function Cell specialisation Tissue structure and function Muscular and nervous system behaviour Communication using waves Uses of electromagnetic waves Revision	Examination Enzymes in action Diffusion of molecules Plants and their environment Energy content of fuels Electrical circuits
Links to prior learning	Practical skills in measuring, titrations, use of thermometers, chromatography.	Cells, tissues, organs and wave properties.	Electricity, enzymes, transport, sampling and fuels.
Cultural Capital Opportunities	https://virtual.edu.rsc.org/titration/experiment/2/5 https://ed.ted.com/best_of_web/4bURoBhk	Reading material – The immortal life of Henrietta Lacks. Rebecca Skloot. https://www.nature.com/articles/s41379-021-00825-7 Natural History Museum - https://www.nhm.ac.uk/visit/galleries-and-museum-map.html - The Human Biology exhibit (Check opening)	Cambridge University botanical gardens https://phet.colorado.edu/en/simulations/filter?subjects=physics&type=html&sort=alpha&view=grid

		https://www.labster.com/simulations/microscopy/ https://www.esa.int/	
Assessment Focus	Internal assessment by use of 4 assignments.	External examination set by Pearson – May	External assessment in Y13.
Name of Knowledge Organiser/Link to Organiser	N/A	Revision mindmap – Biology Revision mindmap – chemistry Revision mindmap – physics Your teacher will provide these to you.	Revision mindmap – Biology Revision mindmap – chemistry Revision mindmap – physics Your teacher will provide these to you.