

## Applied Science

### Year 12

### Year 13

	Year 12			Year 13	
A u t u m n 1	<b>Biology:</b> Cells and microscopy Cells Prokaryotes Plant cells	<b>Chemistry:</b> Prepare and standardise solutions for titration and colorimetry	<b>Physics:</b> Interpreting wave graphs Wave types Wave speed diffraction gratings stationary waves	<b>Biology:</b> Enzymes - protein structures, Enzymes - active sites, Enzymes - biological catalysts, Enzymes - factors affecting activity	<b>Physics:</b> Develop a hypothesis Plan an investigation Record data Process data Interpret and analyse data
A u t u m n 2	<b>Biology:</b> Specialised cells - plants and animals Epithelial tissue	<b>Chemistry:</b> Use chromatography to separate out mixtures	<b>Physics:</b> Musical instruments Optical fibres Endoscopy Electromagnetic waves	<b>Biology:</b> Optional unit of coursework	<b>Physics:</b> Investigate fuels Risks of investigating fuels Units of energy
S p r i n g 1	<b>Biology:</b> Blood vessels and atherosclerosis Fast and slow twitch muscle Nerve tissue Nerve impulse	<b>Chemistry:</b> Electronic structure of atoms Bonding Amount of substances Calculating reacting masses and gas volumes	<b>Physics:</b> Construct cooling curves	<b>Biology:</b> Optional unit of coursework	<b>Physics:</b> Symbols in electrical circuits Power equations Energy usage
S p r i n g 2	<b>Biology:</b> EEG Synapses Brain chemicals	<b>Chemistry:</b> Periodic table and trends Reactions of period 2 and 3 Reactions of metals oxidation	<b>Physics:</b> Evaluate scientific skills developed	<b>Biology:</b> Diffusion of molecules Kinetic theory and diffusion Plant growth and distribution Improving plant growth Sampling techniques	Evaluate a hypothesis
S u m m e	<b>Biology:</b> Revise for the Unit 1 Exam	<b>Chemistry:</b> Revise for Unit 1 exam  Complete any unfinished coursework sections	<b>Physics:</b> Revise for Unit 1 exam  Complete any unfinished coursework sections	<b>Biology:</b> Revise for unit 3 exam  Complete any unfinished coursework sections	<b>Physics:</b> Revise for the Unit 3 exam

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S u m m e r 2	Biology, Chemistry and Physics: Developing a hypothesis Planning an investigation Risk assessments Variables in an investigation Producing a method				