

Year 8	Autumn		Spring		Summer	
	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	Knowledge	Respiratory system <sup>B8</sup> Circulatory system <sup>B8</sup> Aerobic respiration <sup>B8</sup> Gas exchange in plants <sup>B6, B8</sup> Enzymes <sup>B1</sup>	Atomic structure <sup>C3 P6</sup> Periodic table <sup>C4</sup> Properties of metals and non-metals <sup>C7</sup> Properties of group 1,7,0 <sup>C13</sup> Reactivity series <sup>C11</sup> Polymers, ceramics and composites Exothermic and endothermic reactions <sup>C15</sup> Word equations <sup>C8 C9</sup>	Waves <sup>P4</sup> Sound <sup>P4</sup> Ear <sup>SB2</sup> Light <sup>P5</sup> Reflection <sup>P4</sup> Refraction <sup>P4</sup> Eye <sup>SB2</sup>	Classification <sup>B4</sup> DNA <sup>B3</sup> Variation <sup>B3 B4</sup> Inheritance <sup>B3 B4</sup> Human genome project <sup>B3</sup> Natural selection <sup>B4</sup> Extinction <sup>B4 B9</sup> Biodiversity <sup>B9</sup>	Atomic structure <sup>C3 P6</sup> Conservation of mass <sup>C9</sup> Chemical equations <sup>C8 C9</sup> Combustion and fuels <sup>C15 P3</sup> Reactions of metals with oxygen <sup>C11</sup> Thermal decomposition <sup>C11 C15</sup> Acids and alkalis <sup>C8</sup> Making and naming salts <sup>C8</sup>
Skills	<p><b>Planning experimental methods</b> – Identify hazards &amp; plan to control risks. Apply sampling techniques. Identify &amp; choose appropriate independent &amp; dependent variables. Identify &amp; plan to control appropriate control variables.</p> <p><b>Using apparatus</b> - use appropriate apparatus consistently to measure and record and explain differences between related measurements.</p> <p><b>Collecting &amp; recording results</b> – Make sufficient observations &amp; readings with consideration of an appropriate degree of detail, accuracy &amp; precision, produce labelled diagrams. Use &amp; develop systematic tables in which to record data.</p> <p><b>Considering results &amp; drawing conclusions</b> – Use observations, data and scientific knowledge to draw conclusions. Interpret &amp; plot bar charts and line graphs. Calculate mean. Identify patterns, correlations &amp; linear relationships in data. Identify anomalous results. Use line graphs to estimate values</p> <p><b>Evaluating experimental methods &amp; results</b> – Suggest ways to improve an experiment. Suggest reasons for differences in repeat readings and suggest better ways to control variables.</p>					
Assessment	8B1 ICA 1 8B1 ICA 2 8B1 test	8C1 ICA 1 8C1 ICA 2 8C1 test	8P1 ICA 1 8P1 ICA 2 8P1 test	8B2 ICA 1 8B2 ICA 2 8B2 test	8C2 ICA 1 8C2 ICA 2 8C2 test	8P2 ICA 1 8P2 ICA 2 8P2 test

Due to timetable constraints year 7 and 8 are on a rolling rota. All students do the 1 topics (B1, C1, P1) first and then the 2 topics. However, the order of the topics therein varies. These topics all provide the foundation skills/knowledge for future topics (in red). Those topics with a \* students do not meet again but are included as part of a broad and balanced curriculum