

**Plan Of Learning For The Year (Unit/Topic/Project Context)**

<p><b>Half Term 1</b></p> <ul style="list-style-type: none"> <li>• Aromatics</li> <li>• Amines</li> <li>• Isomerism, carbonyls and acids</li> </ul> <p><b>Half Term 2</b></p> <ul style="list-style-type: none"> <li>• Amino acids, DNA and Polymers</li> <li>• Chromatography</li> <li>• Organic synthesis</li> <li>• Rates</li> <li>• Nuclear magnetic resonance spectroscopy</li> <li>• Transition Metals</li> <li>• Transition metals and ions in solution</li> </ul> <p><b>Half Term 3</b></p> <ul style="list-style-type: none"> <li>• Thermodynamics</li> <li>• Properties of period 3 elements and their oxides</li> <li>• Equilibrium constant for homogeneous systems</li> </ul>	<p><b>Half Term 4</b></p> <ul style="list-style-type: none"> <li>• Acids and Bases</li> <li>• Electrochemical cells</li> </ul> <p><b>Half Term 5</b></p> <ul style="list-style-type: none"> <li>• Revision</li> </ul> <p><b>Half Term 6</b></p> <ul style="list-style-type: none"> <li>• Exam</li> </ul>
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<b>Feedback, Retrieval &amp; Assessment</b>	<b>Super curriculum opportunities / extra-curricular activities</b>	<b>Cultural Capital, SMSC, Careers and Futures</b>
<ul style="list-style-type: none"> <li>• Regular self and peer assessment</li> <li>• Regularly assessed homework</li> <li>• Termly Teacher Assessment</li> <li>• Termly Formal Assessment (FA)</li> <li>• Learning logs used to guide feedback and develop students' mindset</li> </ul>	<ul style="list-style-type: none"> <li>• Visits to local university</li> <li>• Visits to local Mine to evaluate salt formation</li> </ul>	<ul style="list-style-type: none"> <li>• Application of Chemistry in real life contexts embedded throughout the course</li> <li>• Development of skills to meet the practical endorsement to allow students to progress to onto practical based degrees</li> <li>• Careers session run with the university</li> </ul>

<b>Common misconceptions</b>	<b>Connecting New Knowledge</b>	<b>Challenge for all</b>
<ul style="list-style-type: none"> <li>• That the reaction is finished, it is stable, it will not react anymore unless you add something</li> <li>• That K increases when equilibrium is re-established after changing concentration of a reactant</li> <li>• If the benzene ring is stable, why do arenes still undergo reactions such as halogenation and nitration?</li> </ul>	<ul style="list-style-type: none"> <li>• Linking GCSE knowledge to new A Level ideas to build upon prior knowledge</li> <li>• Notes provided to students on content</li> <li>• Spaced retrieval homework that covers a wide selection of knowledge to develop deeper understanding of content</li> </ul>	<ul style="list-style-type: none"> <li>• Support is given in lesson for those students who have not taken A Level Mathematics</li> <li>• Modelling in lessons is key to showing students the steps involved in each process</li> <li>• Students are encouraged to question everything to build a deep understanding of the knowledge</li> </ul>