



## CURRICULUM MAP – AS Chemistry

Term Autumn 12 weeks	Advanced Year 12 Chemistry	Term Spring 11 weeks	Advanced Year 12 Chemistry	Term Summer 14 weeks	Advanced Year 12 Chemistry
<p>Autumn: 12 weeks</p> <p>Literacy / numeracy foci</p> <p>Reading skills</p> <p>Comprehension skills</p> <p>Science glossary of terms</p> <p>Writing skills</p> <p>Arithmetic and numerical computation</p> <p>Handling data</p> <p>Algebra</p> <p>Graphs</p> <p>Geometry and trigonometry</p> <p>Homework</p> <p>Transition Work – Summer</p> <p>Holidays</p> <p>End-of-Chapter Exam questions</p> <p>Presentations</p> <p>Revisiting, revising, remembering opportunities</p> <p>Exam question starters from previous topics</p> <p>Retrieval practice</p> <p>Assessments</p> <p>Assessments</p> <p>Year12 Transition Work</p> <p>Year 12 EOC Test/EOC HWK</p> <p>Tracking on Pupil progress</p> <p>Blended learning for students that are self-isolating</p>	<ul style="list-style-type: none"> <li>Atomic Structure</li> <li>Amount of substance</li> <li>Bonding</li> <li>Energetics</li> <li>Kinetics</li> <li>Equilibria</li> </ul> <p><b>Assessment objectives:</b> AO1, AO2, AO3</p> <p>CPAC's for Required Practical's</p> <p><b>Enrichment/life and work skills:</b></p> <ul style="list-style-type: none"> <li>Group work/collaboration</li> <li>Research skills and scientific enquiry</li> <li>Public speaking</li> <li>Empathy</li> </ul> <p><b>SMSC Opportunities:</b> The KS5 Chemistry course continues to develop a pupils ability to make judgements and make reasoned opinions built on knowledge gained at KS3 and KS4</p> <p><b>Extra -Curricular opportunities and trips:</b> TBC</p> <ul style="list-style-type: none"> <li>Science lectures</li> <li>Trouble with Science is Ethics</li> <li>Future scientists virtual Science Club</li> <li>Future Learn resource sharing on Science Club</li> <li>Sixth Form Open evening</li> </ul>	<p>Spring: 10 weeks</p> <p>Literacy / numeracy foci</p> <p>Reading skills</p> <p>Comprehension skills</p> <p>Science glossary of terms</p> <p>Writing skills</p> <p>Arithmetic and numerical computation</p> <p>Handling data</p> <p>Algebra</p> <p>Graphs</p> <p>Homework</p> <p>End of chapter examination questions</p> <p>Presentations</p> <p>Revisiting, revising, remembering opportunities</p> <p>Exam question starters from previous topics</p> <p>Retrieval practice</p> <p>Assessments</p> <p>Assessments</p> <p>Year 12 Assessment 2</p> <p>Year 12 EOC Test/EOC HWK</p> <p>Tracking on Pupil progress</p> <p>Blended learning for students that are self-isolating</p>	<ul style="list-style-type: none"> <li>Oxidation, reduction and redox reactions</li> <li>Periodicity</li> <li>Group 2</li> <li>Group 7</li> <li>Introduction to Organic Chemistry</li> <li>Alkanes</li> <li>Halogenoalkanes</li> <li>Alkenes</li> </ul> <p><b>Assessment objectives:</b> AO1, AO2, AO3</p> <p>CPAC's for Required Practical's</p> <p><b>Enrichment/life and work skills:</b></p> <ul style="list-style-type: none"> <li>Revision skills</li> <li>Empathy</li> <li>Time management</li> <li>Perseverance</li> </ul> <p><b>SMSC Opportunities:</b> Within the science curriculum ' working scientifically ' material is embedded into the curriculum which covers many moral and ethical issues that face scientists due to our technological advances.</p> <p><b>Extra -Curricular opportunities and trips:</b> TBC</p> <ul style="list-style-type: none"> <li>Science lectures</li> <li>Explore King's</li> <li>Future scientists virtual Science Club</li> <li>Future Learn resource sharing on Science Club</li> <li>Science weak activities and assemblies</li> </ul>	<p>Summer: 14 weeks</p> <p>Literacy / numeracy foci</p> <p>Reading skills</p> <p>Comprehension skills</p> <p>Science glossary of terms</p> <p>Writing skills</p> <p>Arithmetic and numerical computation</p> <p>Handling data</p> <p>Algebra</p> <p>Graphs</p> <p>Homework</p> <p>End-of-Chapter Exam questions</p> <p>Presentations</p> <p>Research Project</p> <p>Revisiting, revising, remembering opportunities</p> <p>Exam question starters from previous topics</p> <p>Retrieval practice</p> <p>Assessments</p> <p>Assessments</p> <p>Year 12 PPE</p> <p>Year 12 EOC Test/EOC HWK</p> <p>Tracking on Pupil progress</p> <p>Blended learning for students that are self-isolating</p>	<ul style="list-style-type: none"> <li>Alcohols</li> <li>Organic analysis</li> <li>Thermodynamics</li> <li>Acid and bases</li> </ul> <p><b>Assessment objectives:</b> AO1, AO2, AO3</p> <p>CPAC's for Required Practical's</p> <p><b>Enrichment/life and work skills:</b></p> <ul style="list-style-type: none"> <li>Group work/collaboration</li> <li>Research skills and scientific enquiry</li> <li>Organisation skills.</li> </ul> <p><b>SMSC Opportunities:</b> Making links between organic, inorganic and physical chemistry, students will undertake an independent research project and produce a formal report.</p> <p><b>Extra- Curricular opportunities and trips:</b></p> <ul style="list-style-type: none"> <li>Work experience</li> <li>Future scientists virtual Science Club</li> <li>Future Learn resource sharing on Science Club</li> <li>UCAS applications -Introduction</li> </ul>



## CURRICULUM MAP – Advanced Chemistry

Term Autumn 12 weeks	Advanced Year 13 Chemistry	Term Spring 11 weeks	Advanced Year 13 Chemistry	Term Summer 14 weeks	Advanced Year 13 Chemistry
<p>Autumn: 12 weeks</p> <p>Literacy / numeracy foci Reading skills Comprehension skills Science glossary of terms Writing skills Arithmetic and numerical computation Handling data Algebra Graphs Geometry and trigonometry</p> <p>Homework Transition Work – Summer Holidays End-of-Chapter Exam Questions Presentations</p> <p>Revisiting, revising, remembering opportunities Exam question starters Retrieval practice Assessments</p> <p>Assessments Year 13 Assessment Year 13 PPE 1 Year 13 EOC Test/EOC HWK Tracking on Pupil progress</p>	<ul style="list-style-type: none"> <li>Thermodynamics</li> <li>Kinetics</li> <li>Equilibrium constant</li> <li>Electrode potentials and electrochemical cells</li> <li>Acids, bases and buffers</li> <li>Transition metals</li> </ul> <p><b>Assessment objectives: AO1, AO2, AO3</b> CPAC's for Required Practical's</p> <p><b>Enrichment/life and work skills:</b></p> <ul style="list-style-type: none"> <li>Group work/collaboration</li> <li>Research skills and scientific enquiry</li> <li>Practical Skills (Time-Management and Organisation skills)</li> <li>Public speaking</li> <li>Empathy</li> <li>Cultural capital: Other cultures</li> <li>Future scientists virtual Science Club</li> <li>Future Learn resource sharing on Science Club</li> <li>UCAS applications</li> <li>Blended learning for students that are self-isolating</li> </ul>	<p>Spring: 10 weeks</p> <p>Literacy / numeracy foci Reading skills Comprehension skills Science glossary of terms Writing skills Arithmetic and numerical computation Handling data Algebra Graphs</p> <p>Homework End-of-Chapter Exam Questions Presentations</p> <p>Revisiting, revising, remembering opportunities Exam question starters from previous topics Retrieval practice Assessments</p> <p>Assessments Year 13 PPE 2</p> <ul style="list-style-type: none"> <li>Year 13 EOC Test/EOC HWK</li> <li>Tracking on Pupil progress</li> </ul>	<ul style="list-style-type: none"> <li>Periodicity</li> <li>Reactions of inorganic compounds in aqueous solutions</li> <li>Nomenclature and isomerism</li> <li>Compounds containing the carbonyl group</li> <li>Aromatic chemistry</li> <li>Amines</li> <li>Polymerisation</li> <li>Structure determination</li> <li>Amino acids, proteins, and DNA</li> </ul> <p><b>Assessment objectives: AO1, AO2, AO3</b> CPAC's for Required Practical's</p> <p><b>Enrichment/life and work skills:</b></p> <ul style="list-style-type: none"> <li>Revision skills</li> <li>Empathy</li> <li>Time management</li> <li>Perseverance</li> <li>Practical Skills (Time-Management and Organisation skills)</li> <li>Future scientists virtual Science Club</li> <li>Future Learn resource sharing on Science Club</li> </ul> <p>Blended learning for students that</p>	<p>Summer: 14 weeks</p> <p>Literacy / numeracy foci Reading skills Comprehension skills Science glossary of terms Writing skills Arithmetic and numerical computation Handling data Algebra Graphs</p> <p>Homework End-of-Chapter Exam Questions Presentations Revision</p> <p>Revisiting, revising, remembering opportunities Exam question starters from previous topics Retrieval practice Assessments</p> <p>Assessments A –Level Examinations</p>	<ul style="list-style-type: none"> <li>Organic synthesis and analysis</li> <li>Chromatography</li> </ul> <p><b>Assessment objectives: AO1, AO2, AO3</b> CPAC's for Required Practical's</p> <p><b>Enrichment/life and work skills:</b> Group work/collaboration Research skills and scientific enquiry Empathy Revision skills Exam Skills Future scientists virtual Science Club Future Learn resource sharing on Science Club</p> <p>Blended learning for students that are self-isolating</p>