

	Term 1		Term 2		Term 3	
<b>Key focus</b>	Kinetics Nomenclature and Isomerism Carbonyl Compounds Aromatic Chemistry	Equilibrium Constant $K_p$ Electrode Potentials Amines Polymerisation	Acids, Bases and Buffers Amino Acids, Proteins and DNA Organic Synthesis and Analysis Structure Determination Chromatography	Transition Metals Inorganic Compounds	Revision	
<b>Purpose of the scheme</b>	The purpose of this course is to study matter and energy and how they interact under different conditions and in a variety of settings.					
<b>Pre read (suggested)</b>	<a href="#">BBC Documentary Thalidomide A Wonder Drug - YouTube</a>	<a href="#">The Power of Plastics: Polymers Past, Present and Future (Dr Rachel Platel - Chemistry) - YouTube</a>	<a href="#">The Birth of the Pharmaceutical Industry - YouTube</a>	<a href="#">What Causes the Colour of Gemstones? – Compound Interest (compoundchem.com)</a>		
<b>Key knowledge and skills</b>	Measuring the rate of reaction by an initial rate method.  Measuring the rate of reaction by a continuous monitoring method.	Measuring the EMF of an electrochemical cell.	Investigate how pH changes when weak/strong acids react with weak/strong bases.  Preparation of an organic solid.  Test the purity of the organic solid.	Carrying out simple test-tube reactions to identify transition metal ions in aqueous solution.  Separation of species by thin-layer chromatography.	Revision	
<b>Key words/ vocabulary</b>	Kinetics Rate Order Nomenclature Isomerism Carbon Carbonyl Benzene Electrons Mechanisms	Equilibrium Reactants Products Exothermic Endothermic Cell Electrochemical EMF Amines Polymers	Acids Bases Buffers Amino acids Proteins DNA Infrared spectrometry NMR Chromatography Mass spectrometry	Transition metal Complex Ligand Dentate Coordinate bond Substitution Ions Purity Separation Thin layer chromatography	Revision	
<b>Exam board</b>	AQA A-Level Chemistry					
<b>End point</b>	A-Level Chemistry Exam Paper 1, 2 and 3	A-Level Chemistry Exam Paper 1, 2 and 3	A-Level Chemistry Exam Paper 1, 2 and 3	A-Level Chemistry Exam Paper 1, 2 and 3	A-Level Chemistry Exam Paper 1, 2 and 3	
<b>Assessment method</b>	<ul style="list-style-type: none"> <li>PRP Assessment</li> <li>Intervention</li> </ul>	<ul style="list-style-type: none"> <li>PRP Assessment</li> <li>Mock assessment</li> <li>Intervention</li> </ul>	<ul style="list-style-type: none"> <li>PRP Assessment</li> <li>Classroom Mocks</li> <li>Intervention</li> </ul>	<ul style="list-style-type: none"> <li>PRP Assessment</li> <li>Mock assessment</li> <li>Intervention</li> </ul>	External Exams	

**Curriculum Map – Chemistry– Year 13**

<b>Wider reading / links / research</b>	Maths – $y = mx + c$ , scatter graphs, gradients, tangents, areas/volumes of regular shapes	Technology – plastics Geography – Sustainability	Maths – decimals, standard form, ratios, fractions, percentages, algebraic equations	Maths – decimals, standard form		
<b>Careers links</b>	Pharmacologist Medicinal chemist	Polymer chemist Electrochemist	Analytical chemist Forensic scientist	Academic researcher Colour technologist		