

Chemistry Curriculum Map							
A. Formal Curriculum Key Stage 5							
Core Content & Skills		By the end of key stage FIVE we want all students of Chemistry to know and do the following things: <ul style="list-style-type: none"> - The key principles of organic, inorganic and physical chemistry - Confidently and safely use a range of practical techniques, equipment and hazardous chemicals - Use and evaluate the use of models to illustrate chemical ideas - Analyse data and observations to draw conclusions - Apply chemical knowledge to unfamiliar situations and suggest suitable solutions to real world problems 					
Prior Knowledge & Skills		In KS5, students of Chemistry will build on the following prior learning: <ul style="list-style-type: none"> - Key Chemical ideas including: atomic theory, periodicity, bonding and properties of matter and quantitative chemistry - Use of practical skills and equipment - Problem solving, application of knowledge, data analysis and evaluation. 					
Future knowledge		The Curriculum in KS5 Chemistry will prepare students for the following future learning: <ul style="list-style-type: none"> - Specialisation into Organic, Inorganic or Physical Chemistry, Medicine or Medical Sciences and Natural or Physical Sciences. - Complex, multistep synthesis/ analytical methods 					
Year 13	Key knowledge, skills and concepts TAUGHT, REVISED, REVISITED AND LEARNT	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
		<u>Chemical Industry:</u> Rates, equilibrium, chemical synthesis, green chemistry	<u>Polymers and Life:</u> Functional Groups, synthesis of polymers <u>Oceans:</u> Climate Change, Energy changes	<u>Polymers and Life:</u> Natural polymers, enzymes, spectroscopy <u>Oceans:</u> pH, buffers, Enthalpy and Entropy	<u>Developing Metals:</u> Transition metals + their properties, electrochemistry <u>Colour by Design:</u> Reactions of Benzene, Organic synthesis, chromatography	Revision	
	Key assessment points		End of Unit Test		Mock Exams	End of Unit Tests	Past Papers
Year 12	Key knowledge, skills and concepts TAUGHT, REVISED, REVISITED AND LEARNT	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
		Review of GCSE quantitative Chemistry <u>Elements of Life:</u> Atomic theory + The Periodic Table, <u>Developing Fuels:</u> Thermochemistry Reaction mechanisms	<u>Elements of Life:</u> Quantitative Chemistry, Bonding + Properties of Matter <u>Developing Fuels:</u> Environmental Chemistry Organic molecules	<u>Elements from the Sea:</u> Periodicity, Redox, Electrochemistry <u>Ozone:</u> Environmental Chemistry, Radical reactions, rates of reaction and catalysis	<u>Elements from the Sea:</u> Equilibrium, quantitative chemistry <u>Ozone:</u> Bonding, environmental	<u>Elements from the Sea:</u> Manufacture of halogens <u>What's in a Medicine:</u> Organic molecules + functional groups Organic synthesis	<u>What's in a Medicine:</u> Organic Synthesis Identification of organic substances



					chemistry, reaction mechanisms		
	Key assessment points	Initial Skills Tests	End of Unit Tests		End of Unit Test	End of Unit Tests	Mock Exams
B. Holistic development via Enrichment/Personal Development Curriculum							
C3 Challenge (Y12). Wide range of Chemistry and applied Applied Chemistry books available for students to borrow for further reading.							

