

	Half term 1			Half term 2		
<b>Key focus</b>	The Human Nervous System	Chemical Changes	Radioactivity	Reproduction	Wave Properties	Energy Changes
<b>Key knowledge and skills</b>	Structure of Nervous system Reflexes Measuring Reactions Time	Atoms in reactions Concentration Reactions of metals Reactions of acids	Atoms and Radiation Nuclear Radiation Radioactivity and Half-Life Irradiation and Contamination	Reproduction DNA Genetic disease	Waves and their properties Reflection and Refraction Sound	Energy in reactions Reaction profiles
<b>Key words/ vocabulary</b>	Synapses Neuron Electrical Impulse Neurotransmitter	Relative formula mass Moles H+ ions Redox Displacement	Alpha Beta Gamma Isotope Ionisation	Allele Chromosome Inherited Disorder Sexual Reproduction Asexual Reproduction Genetic Screening	Transverse Longitudinal Oscilloscope Reflection Refraction	Exothermic Endothermic Reaction profile
<b>Assessment method</b>	End of topic assessment Extended Writing	End of topic assessment Extended Writing	End of topic assessment Extended Writing	End of topic assessment Extended Writing	End of topic assessment Extended Writing	End of Topic Assessments Extended Writing Tasks Practical Element (Variables affecting temperature change)
<b>Wider links</b>	Maths – $y = mx + c$ , scatter graphs, gradients, tangents, areas/volumes of regular shapes	Maths – significant figures, means, inequalities, rearranging equations and orders of magnitude.	Maths Skills – interpolation from lines of best fit	PER – ethics of embryo screening Maths – ratios/probability	Maths – change subject of equation Music – Longitudinal sound waves, frequency (pitch), modelling transverse waves using string, the link between frequency of vibrations and pitch.	Maths – Significant figures, means, graphs
<b>Enrichment opportunities</b>	<a href="#">Homeostasis and response - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize</a> <a href="#">Revision - AQA Trilogy - BBC Bitesize</a>	<a href="#">GCSE Combined Science - AQA Trilogy - BBC Bitesize</a>	<a href="#">Chernobyl – The Invisible Enemy</a>	<a href="#">Inheritance, variation and evolution - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize</a>	<a href="#">Waves - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize</a>	<a href="#">Energy Changes - BBC Bitesize</a>
<b>Careers links</b>	Carer Nurse Doctor Neuroscientist	Chemist Chemical engineer Hairdressing Fire service	Radiographer	Geneticist Doctor Nurse	Musician Piano tuner	Nuclear scientist

	Half term 3				Half term 4		
<b>Key focus</b>	Variation and Evolution	Electromagnetic Waves	Rates of Reaction	Electrolysis	Hormonal Coordination	Chemical Calculations	Crude Oil and Fuels
<b>Key knowledge and skills</b>	Genetic engineering Variation and Evolution Selective breeding Ethics and Genetic Technologies	Electromagnetic Spectrum EM Waves and Communication EM Waves and their Hazards and Applications	Rates of reaction Collision Theory Reversible Reactions	Electrolysis of Molten and Aqueous Electrolytes Extraction of Aluminium	Hormones Hormones and control of reproduction Rates of reaction Reversible reactions	What happens to the number of atoms in a chemical reaction? What is concentration?	Crude oil and it's separation. Properties and uses of hydrocarbons
<b>Key words/ vocabulary</b>	Variation Evolution Natural Selection Genetic Engineering Adaptation Mutation	Frequency Wave Speed Wavelength Optical Fibre Carrier Waves Cancer Radiation Dose	Concentration Surface Area Catalyst Activation Energy Precision Equilibrium	Anode Cathode Electrolyte Cryolite Reactivity Series Electrode Electrolysis Cell	Negative feedback Diabetes type I and II Contraception IVF Adrenaline Thyroxine	Atomic mass Formula mass Concentration Dilute Concentrated	Hydrocarbons Combustion Fractional distillation Cracking
<b>Assessment method</b>	End of topic assessment Extended Writing	End of topic assessment Extended Writing	End of topic assessment Extended Writing	End of topic assessment Extended Writing	End of topic assessment Extended Writing	End of Topic Assessments Extended Writing Tasks	End of topic assessment Extended Writing
<b>Wider links</b>		Maths –change subject of equation	Maths – $y = mx + c$ , scatter graphs, gradients, tangents, areas/volumes of regular shapes		Food Technology – Nutrition/Diabetes/Obesity	Maths – Use of equations	Technology – plastics Geography – Sustainability Maths –change subject of equation
<b>Enrichment opportunities</b>	<a href="#">Inheritance, variation and evolution - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize</a>	<a href="#">Waves - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize</a>	<a href="#">The rate and extent of chemical change - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize</a>	<a href="#">GCSE Science Revision Chemistry "Introducing Electrolysis" - YouTube</a>	<a href="#">Homeostasis and response - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize</a>	<a href="#">Quantitative Chemistry - BBC Bitesize</a>	<a href="#">Organic chemistry - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize</a>
<b>Careers links</b>	Animal breeder Evolutionary biologist	Communications Network Engineer	Industrial Chemist		Endocrinologist Carer Nurse Doctor	Laboratory scientist Chemical technician	Organic chemist Chemical engineer

	Half term 5	Half term 6
<b>Key focus</b>	Paper 1 Revision	Paper 1 Revision Paper 1 Mock Exam Paper 1 Feedback and Intervention
<b>Key knowledge and skills</b>	Students will follow a coordinated revision programme that will give the opportunity to review skills and knowledge across the Combined Science GCSE.	Students will follow a coordinated revision programme that will give the opportunity to review skills and knowledge across the Combined Science GCSE.
<b>Key words/ vocabulary</b>		
<b>Assessment method</b>	Each topic will be assessed to identify skills and knowledge gaps with the opportunity for to reteach students and address misconceptions. In class mock examinations will provide students with a summary of the progress made and further opportunities to move forward.	Three mock exams, one in each of the three sciences.
<b>Wider links</b>		
<b>Enrichment opportunities</b>		
<b>Careers links</b>		