

Combined Science Curriculum Overview		Cycle		
		1	2	3
Year 7	Topic	Safe Science followed by Introducing key Biology concepts	Introducing key Chemistry concepts	Introducing key Physics concepts
	Key knowledge	(Cells, Enzymes, Reproduction and Hormones)	(Particles, Separation techniques, Atoms, Periodic table, Chemical Reactions)	(Energy & Transfer of Energy, Motion, Forces & Motion)
	Key vocabulary	Nucleus, Cell, Eukaryotic, Prokaryotic, Mitochondria, Chloroplast, Cell Wall	Atom, Compound, States of Matter, Element, Solvent, Solute, Solution, Soluble	Balanced, Unbalanced, Scalar, Renewable, Non-Renewable, Joules, Newtons, Sankey
Year 8	Topic	Building on key Biology Concepts	Building on key Chemistry Concepts	Building on key Physics Concepts
	Key knowledge	(Cell division & Cell Transport, DNA & Inheritance, Evolution, Health & Disease)	(Periodic Table groups, Rates of Reaction, Chemical bonding, Acids & Alkali)	(Waves, Light and the EM Spectrum, Electricity, Electrical Circuits, Resistance, Space)
	Key vocabulary	Ribosomes, Chromosomes, Stem cells, Allele, Gene, Bacteria, Viruses, Fungi, Protist	Base, Inert, Molecule, Diatomic, Halogens, Activation energy, Covalent	Transverse, Longitudinal, Hertz, Radiowaves, Series, Parallel, Resistance, Static
Year 9	Topic	GCSE Coverage of CB1, CB6, CB9	GCSE Coverage of CC1-2, CC3, CC4, CC9, CC13-15	GCSE Coverage of CP4, CP5, CP1, CP2, CP3
	Key knowledge	(Ecosystems & material cycles, Key concepts, Natural selection & GM, Plant structures and functions)	(States of matter, Separation & purification, Atomic structure, the Periodic Table, Chemical Calculations, Groups in the Periodic Table reactions)	(Waves, Light and the EM Spectrum, Motion, Forces & Motion, Conservation of Energy)
	Key vocabulary	Habitat, Quadrat, Active Transport, Osmosis, Abiotic, Parasitism, Transpiration, Translocation	Crystallisation, Exothermic, Isotope, Catalyst, Chromatography, Filtration, Mendeleev	Velocity, Vector, Scalar, Efficiency, Kinetic Energy, Gravitational Potential Energy, Work done
Year 10	Topic	GCSE Coverage of CB2, CB3, CB4, CB5	GCSE Coverage of CC5-7, CC8, CC10	GCSE Coverage of CP2, CP3, CP6-9
	Key knowledge	(Cells and control, Genetics & Inheritance, Natural selection & GM, Health & Disease)	(Chemical bonding, Acids & Alkalis, Electolysis, Extracting metals)	(Electricity & circuits, Particle model, forces & matter, Radioactivity)
	Key vocabulary	Adrenalin, Phenotype, Punnett square, Meiosis, Mitosis, Diploid, Genotype, Selective Breeding	Anode, Electrode, Ion, Neutralisation, Oxidation, Reduction, Electrostatic forces, Cation, Anion	Alpha, Beta, Gamma, Positron, Pressure, Electromagnetism, Transformer, Absolute zero
Year 11	Topic	GCSE Coverage of remaining Biology & Chemistry content	GCSE Coverage of remaining Physics content & revision of paper 1 topics	GCSE EXAM WINDOW, Individual teachers revise content/skills needed for their pupils.
	Key knowledge	(Coordination & Control, Respiration, Rates of Reaction, Periodic Table, Core Practical focus)	(Particles, Density, Gas Temperature & Pressure, Bending & Stretching)	
	Key vocabulary	Anaerobic, Plasma, Electromagnet, Indicator, Lactic Acid, Aerobic, Methyl Orange	Specific Heat Capacity, Gas Pressure, Spring Constant, Kinetic, Kelvin, Pascals, Density	
	Assessments	Wk3 STR, Wk7 B2 Mock, Wk11 C2 & P2 Mock	Wk3 STR, Wk7 B1 Mock?, Wk11 C1 & P1 Mock?	

Year 7-10 have the same assessment structure during cycles, week 3 assessment is an STR strip activity, week 7 small number of exam questions, week 11 a 40-60 minute exam paper.