

Key Stage 4 Subject Overview: Combined Science

Course Information: The course offers the chance to gain understanding of: **Biology**—Cell Biology, Organisation, Infection and response, Bioenergetics, Homeostasis, response, inheritance, variation and evolution and ecology. **Chemistry**—Atomic structure, periodic table, bonding, structure and properties of matter, quantitative chemistry, chemical changes, energy changes, the rate and extent of chemical change, organic chemistry, chemical analysis, chemistry of the atmosphere and using resources. **Physics**—energy, electricity, particle model of matter, atomic structure, forces, waves, magnetism and electromagnetism.

Course Structure:

	BIOLOGY PAPER 1	BIOLOGY PAPER 2	CHEMISTRY PAPER 1	CHEMISTRY PAPER 2	PHYSICS PAPER 1	PHYSICS PAPER 2
What is assessed	Cell Biology, organisation, infection and response and bioenergetics.	Homeostasis and response, inheritance, variation and evolution and ecology	Atomic structure, and the periodic table, bonding, structure and the properties of matter, quantitative chemistry, chemical changes and energy changes.	The rate and extent of chemical change, organic chemistry, chemical analysis, chemistry of the atmosphere and using resources.	Energy, electricity, particle model of matter and atomic structure	Forces, Waves, magnetism and electromagnetism
Course weighting	16.7% (1hour 15minutes) - 70marks Written exam—multiple choice, structured, closed short answer and open responses.	16.7% (1hour 15minutes) - 70marks Written exam—multiple choice, structured, closed short answer and open responses.	16.7% (1hour 15minutes) - 70marks Written exam—multiple choice, structured, closed short answer and open responses.	16.7% (1hour 15minutes) - 70marks Written exam—multiple choice, structured, closed short answer and open responses.	16.7% (1hour 15minutes) - 70marks Written exam—multiple choice, structured, closed short answer and open responses.	16.7% (1hour 15minutes) - 70marks Written exam—multiple choice, structured, closed short answer and open responses.

	Year 9			Year 10			Year 11		
	Autumn	Spring	Summer	Autumn	Spring	Summer	Autumn	Spring	Summer
Bioenergetics		Infection and response	Bonding structure and properties of matter	Energy changes	Particle model of matter	Inheritance	Chemical analysis	Waves	REVISION GCSE EXAMS
Cell Biology		BIOLOGY PAPER 1	Quantitative chemistry	CHEMISTRY PAPER 1	Atomic structure	Variation and evolution	Chemistry of the atmosphere	4Magnetism and electromagnetism	
Organisation			Chemical changes	Energy	PHYSICS PAPER 1	Evolution	Using resources	PHYSICS PAPER 2	
Required experiments		Required experiments	Required experiments	Electricity	Homeostasis and response	BIOLOGY PAPER 2	CHEMISTRY PAPER 2	REVISION	
				Required experiments	Required experiments	The rate and extent of chemical change	Forces		
						Organic chemistry			
						Required experiments			