

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

*= Taught in year 9