

Year 12 Science - Overview of Content

Biology

	Autumn Term		Spring Term		Summer Term	
	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	Trilogy Double Award - Topic Overview	Cell structure, Cell division, Biological membrane, Biological molecules, Biological molecules/ Nucleic acids		Enzymes, Communicable diseases, Exchange surfaces and breathing, Transport in Animals, Classification and evolution		Biodiversity, Transport in plants, Hormonal communication, Neuronal communication
Assessment	End of topic tests (to include questions based on required practicals and maths skills) and /or assessed homework					

Chemistry

	Autumn Term		Spring Term		Summer Term	
	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	Topic Overview	Foundations in A Level Chemistry (module 2) A level chemistry	Foundations in A Level Chemistry (module 2) Titration experiments,	Periodic table and energy (module 3) Periodicity, Groups 2&7,	Periodic table and energy (module 3) Rates, equilibrium and	Core organic chemistry (module 4) Alkanes, alkenes, alcohols,
Assessment	Transition test, moles and reactions test	Electrons and bonding test, MOCK examination	Acids and redox test, enthalpy test	Periodicity, groups 2&7 test, rates & equilibrium test	Organic chemistry test	MOCK examination

Physics

	Autumn Term		Spring Term		Summer Term	
	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	Topic Overview	Practical skills, physical quantities, units and measurements, Motion, Materials	Car stopping distance, Forces in action, Newton's laws of motion	Density and pressure, Work, energy and power, Wave properties	Young double -slit experiment and stationary waves, Electricity : charge and current, Forces and motion test	Electricity: energy, power and resistance, Electricity: electrical circuits, Quantum physics
Assessment	Equations of motion test	Materials and Newton's laws test and mock examinations		Waves test		Electricity and quantum test and MOCK examination

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Biology

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	Trilogy Double Award - Topic Overview	Hormonal communication, Neuronal communication, Homeostasis, Excretion, Manipulating genomes, Cloning and biotechnology		Respiration, Genetics of living systems, Patterns of inheritance, Plant responses, Photosynthesis		Ecosystems, Population and sustainability
Assessment	End of topic tests (to include questions based on required practicals and maths skills) and /or assessed homework					

Chemistry

	Autumn Term		Spring Term		Summer Term	
	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	Topic Overview	Organic chemistry and analysis (module 6)	Organic chemistry and analysis (module 6)	Physical chemistry (module 5)	Physical chemistry (module 5)	Physical chemistry (module 5)
Assessment	Year 12 recap test, arenes, acids & amines test	MOCK examination, Nitrogen compounds, polymers and synthesis test	MOCK examination	Rates, equilibrium and acids test	Enthalpy and energy test	A level examinations

Physics

	Autumn Term		Spring Term		Summer Term	
	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	Topic Overview	Ideal gases, Oscillations	Gravitational fields and capacitance, Stars, Cosmology	Particle physics, Radioactivity and nuclear physics, Electric fields	Medical imaging, Magnetic fields	Exam Practice
Assessment	Thermal and ideal gases tests	Circular, oscillations and gravitational test, space test and mock examination		MOCK examination		