

Subject map KS4 / KS5 Science

	TERM					
	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
<b style="color: red;">Emerging Edexcel ELC	<p>1A Cells, genetics, inheritance and modification</p> <p>Students will explore: Cells, Genetics, Inheritance and modification</p>	<p>1A Chemistry 1A – Atoms, compounds and states of matter</p> <p>Students will explore: Atomic structure, The periodic table, Ionic bonding, Covalent bonding, Metallic bonding, States of matter</p>	<p>1A Forces, Movement and Energy</p> <p>Students will explore:</p> <p>Motion, Forces, Energy</p>	<p>1B Health and Disease</p> <p>Students will explore: Disease, Prevention and medicines, Health</p>	<p>1B Waves and radiation</p> <p>Students will explore: Waves, Electromagnetic spectrum, Atoms, Radiation</p>	<p>1B Separating mixtures, breaking down substances, acids and metals</p> <p>Students will explore: Methods of separating and purifying substances, Breaking down ionic compounds, Acids, Metals</p>
<p>Assessment: One written paper per module.</p>						
<b style="color: red;">Developing Edexcel ELC Further	<p>2A Electricity and Magnets</p> <p>Students will explore: Electrical circuits, Magnets, Electricity in the home</p> <p>2A Chemical reactions: patterns, energy and rates of reaction</p> <p>Students will explore: Group 1, Group 7, Group 0, Heat energy changes in chemical</p>	<p>2A Plants and Ecosystems</p> <p>Students will explore: Plants and interdependence in ecosystems</p> <p>2B Chemistry in our World</p> <p>Students will explore: Fuels, Earth's atmosphere</p>	<p>2B Chemistry in our World (assessment)</p> <p>2B Human Biology</p> <p>Students will explore: Hormones, Regulation, Circulation</p>	<p>2B Energy and Particles</p> <p>Students will explore: Work and energy, Particles, Stretching</p>	<p><b style="color: red;">Start IGCSE top up Biology Sections 1,2,3,4</p> <p>B1 Characteristics of living organisms</p> <p>B2 Cells</p> <p>B3 Biological Molecules</p> <p>B4 Enzymes</p>	<p><b style="color: red;">Biology sections 5,6,7</p> <p>B5 Plant Nutrition</p> <p>B6 Animal Nutrition</p> <p>B7 Transport</p>

	reactions, Rates of reaction					
Assessment: One written paper per module.						
Secured	Chemistry Sections 1,2,3,4	Chemistry Sections 5,6,7	Physics Sections 1,2,3	Physics Sections 4,5,6	Biology Sections 8,9, 10	Biology Sections 11,12,13
IGCSE	C1 The particulate nature of matter C2 Experimental techniques C3 Atoms elements and compounds C4 Stoichiometry	C5 Electricity and Chemistry C6 Energy changes in chemical reactions C7 Chemical reactions	P1 Motion P2 Work, energy and power P3 Thermal physics	P4 Properties of waves including light and sound P5 Electricity and magnetism P6 Electric circuits	B8 Gas exchange and respiration B9 Co-ordination and response B10 Reproduction	B11 Inheritance B12 Organisms and their environment B13 Human influences on ecosystems
IGSCE	Chemistry Sections 8,9, 10	Chemistry Sections 11,12,13,14	Physics Sections 7,8	Revision A03 Objectives	Exam practice	
	C8 Acids, bases and salts C9 The periodic table C10 Metals	C11 Air and water C12 Sulfur C13 Carbonates C14 Organic chemistry	P7 Electromagnetic effects P8 Atomic physics			
Paper 1 45 minutes A multiple-choice paper consisting of 40 items of the four-choice type Paper 3 2 hours A written paper consisting of short-answer and structured questions Paper 6 1 hour 30 minutes Alternative to Practical						

Assessment

The teacher will use summary assessment to inform their planning, support individuals and adapt lessons accordingly for their class. We will assess ongoing progress through questioning in class and assessment tasks in the classroom. Intervention will be targeted where it is needed. There will be a half termly written paper which will assess students' ability to apply the knowledge and skills they have studied in that half-term. The papers will also include questions based on previous units to test how deeply embedded the learning and understanding is i.e. cumulative assessment. The papers will include questions to assess the quality of written communication in science as well as numeracy skills.