



Term	Autumn		Spring 1	Spring 2	Summer 1	Summer 2
Topic	<p align="center">Examined Unit Unit 1: Principles and Applications of Science 1</p>			<p align="center">Coursework units Unit 2: Practical Scientific Procedures and Techniques Unit 8: Physiology of Human Body Systems</p>	<p align="center">Revision for Unit 1 External exam</p>	<p align="center">Coursework units Unit 2: Practical Scientific Procedures and Techniques Unit 8: Physiology of Human Body Systems</p>
Content	<p>Structure and function of cells and tissues Learners will study cell structure and function to include: eukaryotic and prokaryotic cells, microscopes and calculations. They will be taught how stem cells can differentiate into different types of cells to include: palisade cells, red and white blood cells, sperm and egg cells and root hair cells. They will understand the structure and function of different types of tissues to include: epithelial, endothelial, nervous and muscular.</p> <p>Waves in Communication Learners will study the features common to all waves and their applications in musical instruments. They will look at how waves are used in communication with applications in medicine and fibre optics as well as the uses of electromagnetic waves.</p>	<p>Periodicity and Properties of Elements Learners will study the electronic structure of atoms and bonding to include: ionic, covalent and metallic. They will study the periodic table and the physical and chemical properties of the elements in it</p>	<p>Undertake titrations and colourimetry Learners will complete the first assignment for unit 2</p> <p>The physiology of the digestive system and the use of corrective treatments for dietary related diseases Learners will complete the first assignment for unit 8</p>	<p>Recap content from unit 1 and revision using past papers</p>	<p>Undertake calorimetry to study cooling curves Learners will complete the second assignment for unit 2</p> <p>The impact of disorders on the physiology of the lymphatic system Learners will complete the second assignment for unit 8</p>	
Rationale/ Linking	<p>Content for unit 1 builds on knowledge from GCSE and is examined by means of an external assessment. If the students sit this assessment in June of y12 there is an opportunity for them to resit the exam if they wish to improve their grade</p>			<p>Students will start two separate units of coursework because they will have two different teachers.</p>		
	End of unit assessment for 'Structure and	End of unit assessment for 'Waves in	End of unit assessment for 'Periodicity and	Unit 2 assignment 1 Unit 8 assignment 1	External exam for unit 1	Unit 2 assignment 2 Unit 8 assignment 2



Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	Unit 3: Science Investigation Skills External assessment		Unit 2: Practical Scientific Procedures and Techniques Unit 8: Physiology of Human Body Systems Coursework units			
Content	Students will learn how to plan investigations, collect and analyse data, draw conclusions and evaluate their findings. This will be done in the context of the following topics: enzymes, diffusion, plants, fuels and electricity		Recap of content and revision for unit 3 external assessment Recap of content and revision for unit 1 external assessment for students who are resitting	<p>Undertake chromatographic techniques to identify components in mixtures Review personal development of scientific skills Learners will complete the third and fourth assignments for unit 2</p> <p>Understand the impact of disorders of the musculoskeletal system Learners will complete the third assignment for unit 8</p>		
Rationale/ Linking	Students will utilise their theoretical knowledge from unit 1, together with practical skills from their coursework. By taking this exam in January there is the opportunity for a resit in June if required.		Students will sit their second external assessment, and will receive their results in March giving them the opportunity to resit any modules for a final time in June.	Unit 2 and 8 coursework completed for timely SV in May.		
	End of unit assessments on	Y13 mock exam	External assessment: Unit 3		Resit opportunity for units 1 and 3	