

[illegible]

[illegible]

[illegible]

See Year 10 map on the next page.

Subject : Science
Year 10 Curriculum Map 2022 - 2023

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
What am I learning?	We start by looking at Variables and Experimental skills. Students then study Communicable diseases, Preventing and treating diseases. We conclude with non-communicable diseases	Students will study Electrical circuits and electricity in the home. The next topic will be Chemical changes, Electrolysis and Energy changes	The first topic this term will be molecules and matter followed by Radioactivity	The first topic this term will be Photosynthesis, followed by Respiration and the Human nervous system	Students will study Rates and equilibrium, Crude oil, and Fuels; Organic reactions and Polymers	Students will study Forces in balance and Motion. We conclude with Forces and pressure.
Why am I learning this?	The study of experimental skills will be used throughout to enable learners to obtain and analyse data accurately. Learning about antiseptics and antibiotics in disease control. Understand effects of lifestyle factors – diet, alcohol, and smoking on the incidence of non-communicable diseases at local, national, and global levels	Enhance numeracy skills. Calculate charge flow, resistance, and potential differences in electric circuits. Understand the heating effects of current. The many applications of neutralisation. Electrolysis explains how we split ionic compounds to get useful products and its industrial applications	Each state of matter stores heat differently and energy is needed to move from one state to another. Learn real life uses and danger of radiations, the types, and properties. Clarify misconceptions.	Bioenergetics maintains the balance of oxygen and carbon dioxide needed for survival. Understand the role of sensory and motor neurones in coordination and control. Appreciate how the eye works, vision problems and their corrections	How human activity has impacted climate change. Understand the differences between synthetic and naturally occurring polymers.	Deepen understanding of forces in transport, application of forces in everyday life such as car safety/stopping distances. Gain increased knowledge of the importance of sticking to the speed limit, wearing a seat belt, gravity, weight, and pressure
How will I be supported?	Sentence starters, Scaffolding, Videos Modelling of tasks Interactive tasks, required practicals	Sentence starters Scaffolding, Videos Modelling of tasks Picture Sources, required practicals	Sentence starters Scaffolding, Videos Modelling of tasks Picture Sources, required practicals	Sentence starters Scaffolding, Videos Modelling of tasks Picture Sources, required practicals	Sentence starters Scaffolding, Videos Modelling of tasks Picture Sources, required practicals	Sentence starters Scaffolding, Videos Modelling of tasks Picture Sources, required practicals
How will I be challenged?	Conducting required practicals and analysing their results Higher level thinking (e.g. evaluation tasks), Exampro Questions – past paper style questions.	Conducting required practicals and analysing their results Higher-level thinking (e.g., evaluation tasks), Exampro	Higher ability reading material. Pushing evaluation skills	Higher ability reading material. Pushing evaluation skills	Higher ability reading material. Pushing evaluation skills	Higher ability reading material. Pushing evaluation skills

		Questions — past paper style questions.				
--	--	---	--	--	--	--

Subject : Science Year 11 Curriculum Map 2022 - 2023						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
What am I learning?	We start by looking at Variable and Experimental skills. From the above topic students study Photosynthesis and Respiration and then conclude with principles of homeostasis	We move on to study the difference between vector and scalar quantities, speed and velocity. Learners also learn the calculation for velocity. The next topic on the map will be rate and equilibrium	The first topic this term will be the Biological responses, followed by forces. Learners then move on to study organic chemistry and chemical analysis	We start by looking at genetics and reproduction followed by earth resources. We then move on to study a final topic on waves	Students will be taking their summer GCSE exams	Students will be taking their summer GCSE exams
Why am I learning this?	The study of experimental skills will be used throughout the study of science to enable learners obtain and analyse data accurately. Bioenergetics also maintains the balance of oxygen and carbon dioxide needed for survival	Students will learn how physical factors impact their lives and work. The lessons and activities will help students become aware of factors like friction, gravity and weight. Learners will understand how industries make more profit by changing certain factors.	Learners will study how the human body responds to various stimuli. They will also learn how terminal velocity is achieved and also appreciate how chemists analyse samples in crime scenes	Genetics enable learners to understand the origin of organisms whereas earth resources explain how materials are extracted. Waves will help learners appreciate	Students will be taking their summer GCSE exams	Students will be taking their summer GCSE exams
How will I be supported?	Sentence starters Scaffolding, Videos Modelling of tasks Interactive tasks, required practicals	Sentence starters Scaffolding, Videos Modelling of tasks Picture Sources, required practicals	Sentence starters Scaffolding, Videos Modelling of tasks Picture Sources, required practicals	Sentence starters Scaffolding, Videos Modelling of tasks Picture Sources, required practicals		
How will I be challenged?	Conducting required practicals and analysing their results Higher level thinking (e.g. evaluation tasks), Exampro Questions	Conducting required practicals and analysing their results Higher level thinking (e.g. evaluation tasks), Exampro Questions	Higher ability reading material. Pushing evaluation skills	Higher ability reading material. Pushing evaluation skills		

