

CURRICULUM INTENT

The Science department aims to grasp students' curiosity as much as possible through exciting lessons; creating an environment where students will need to critically think and provide logical reasoning using various methods of investigation, such as observation, comparison, experimentation, and mathematical manipulation of data.

SCHEME OF LEARNING/COURSES/CURRICULUM MAP

KEY STAGE 3 – YEAR 9

YEAR 9	OCR Gateway	BIOLOGY	CHEMISTRY	PHYSICS
Autumn Term	1	Microscopes and Cell Structure	The Particle Model	The Atomic Model
	2	Respiration	Purity and Separation	Energy and Temperature
Spring Term	1	Photosynthesis	Chromatography	Pressure
	2	Protein Synthesis	Types of Chemical Reaction	Circuits
Summer Term	1	Enzymes	Earth Systems	Resistance
	2	Supplying the Cell	Electron Arrangement	Sensing Circuits

KEY STAGE 4 – YEAR 10

YEAR 10				
Autumn Term		SUPPLYING THE CELL (CONTINUED) 2.1 b	Bonding	Magnets and Magnetic Fields P4.1
	1	THE CHALLENGES OF SIZE I B2.2A	Giant Covalent Structures	Electricity P4.2
		THE CHALLENGES OF SIZE II B2.2b	The Periodic Table	Motion P2.1
		THE NERVOUS SYSTEM B3.1		Motion P2.1
	2	Finish B3.1 and start B3.2 - Endocrine System	Energetics	Newtons Laws P2.2
		B3.2 continued	Electrolysis	Materials P2.2
Spring Term		MAINTAINING INTERNAL ENVIRONMENTS B3.3	Moles and Reacting Masses	Machines P2.3
	1	B3.3 continued and Start B4.1	Gas Volumes and Predicting Yields	Waves P5.1
		B4.1 Ecosystems	Reactions of the Periodic Table	Electromagnetic Waves P5.2
		B4.1 continued, start B5.1	Noble Gases	Electromagnetic Waves and Matter P5.3
	2	INHERITANCE B5.1 continued	Rates	Energy P7.1
		INHERITANCE B5.1 continued	Catalysis	Energy and efficiency 7.2.1

YEAR 10 CONTINUED ..				
Summer Term		B6.1 BIODIVERSITY & SAMPLING	Equilibria	Efficiency P7.2
	1	PAG Block 1	Cation and Anion Testing	Radioactivity P6.1
		PAG Block 2	Analytical Techniques	Fission and Fusion P6.2
		Mock exams	Mock Exams	Mock exams
	2	Practical endorsement	Practical Endorsement	Practical endorsement

KEY STAGE 4 – YEAR 11

YEAR 11				
Autumn Term		FEEDING THE HUMAN RACE B6.2	Fertilisers	Global Challenges P8.1
	1	Continue B6.2 and start B6.3	Metal Extraction	Motion and Stopping Distances
		MONITORING & MAINTAINING HEALTH 6.3 continued	Choice of Materials	Forces in Collisions
		NON COMMUNICABLE DISEASE 6.3 Part 2	Carbon Chemistry	Resources P8.2
	2	NON COMMUNICABLE DISEASE 6.3 Part 2 continued	Homologous Groups	Energy Sources
		COMMUNICABLE DISEASE 6.3	Polymers	How we use Energy
Autumn Term		FEEDING THE HUMAN RACE B6.2	Fertilisers	Global Challenges P8.1
	1	Continue B6.2 and start B6.3	Metal Extraction	Motion and Stopping Distances
		MONITORING & MAINTAINING HEALTH 6.3 continued	Choice of Materials	Forces in Collisions
		NON COMMUNICABLE DISEASE 6.3 Part 2	Carbon Chemistry	Resources P8.2
	2	NON COMMUNICABLE DISEASE 6.3 Part 2 continued	Homologous Groups	Energy Sources
		COMMUNICABLE DISEASE 6.3	Polymers	How we use Energy

YEAR 11 CONTINUED ..

Spring Term		NON COMMUNICABLE DISEASE 6.3 Part 2 continued	Global Warming and Climate Change	Space P8.3
	1	Exercise and Diet	Data Analysis	Satellites and Orbits
		Treating CVD		Our Solar System
		Module 1-3 Review	Module 1-3 Review	Module 1-4 Review
	2	Practical Endorsement Review	Practical Endorsement Review	Practical Endorsement Review
		Module 1-3 Exam Questions	Module 1-3 Exam Questions	Module 1-4 Exam Questions
Summer Term		Module 4-6 Review	Module 4-6 Review	Module 5-8 Review
	1	Practical Endorsement Review	Practical Endorsement Review	Practical Endorsement Review
		Module 4-6 Exam Questions	Module 4-6 Exam Questions	Module 5-8 Exam Questions
	2	Exams	Exams	Exams
Spring Term		NON COMMUNICABLE DISEASE 6.3 Part 2 continued	Global Warming and Climate Change	Space P8.3
	1	Exercise and Diet	Data Analysis	Satellites and Orbits
		Treating CVD		Our Solar System
		Module 1-3 Review	Module 1-3 Review	Module 1-4 Review
	2	Practical Endorsement Review	Practical Endorsement Review	Practical Endorsement Review
		Module 1-3 Exam Questions	Module 1-3 Exam Questions	Module 1-4 Exam Questions

FEEDBACK POLICY

In Science we recognise that feedback is a powerful tool that enables students to understand how well they are doing and what steps they need to take to improve upon their learning. The Science team aims to establish a broad and consistent approach to how students receive feedback. To ensure this happens the Science department will use a range of formal and informal assessments in order to modify teaching and learning activities to improve student attainment. During lessons, all tasks will be modelled to students to provide a clear framework for the lesson and students will be provided with in depth written feedback from assessments every half term alongside quality verbal feedback on their progress. Homework tasks will be set bi-weekly via online platforms and contain questions that have been previously identified as possible misconceptions.