

Science Department Curriculum Map KS3 Science September 2023

Curriculum Intent

Our students will experience the nature of scientific processes through scientific enquiry and develop an understanding of the world we live in.

	Autumn Term	Spring Term	Summer Term
Year 7	Working scientifically	Physics Big Idea 2 part 1: Electromagnets	Chemistry Big Idea 7 part 1: Earth
Content	Biology Big Idea 8 part 1: Organisms	Chemistry Big Idea 6 part 1: Reactions	Physics Big Idea 3 part 1: Energy
content	Physics Big Idea 1 part 1: Forces	Biology Big Idea 9 part 1: Ecosystems	Revision and assessment fortnight
	Chemistry Big Idea 5 part 1: Matter		STEM Activities
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Year 7	Safety in science		
Skills	Planning investigations		
	Recording data		
	Analysing patterns		
	Evaluating data		
Year 7 Key	Baseline assessment in first week back	Interim assessments on all Big Idea Part 1s	Interim assessments on all Big Idea Part 1s
Points	Interim assessments on all Big Idea Part 1s		End of year assessment on all content covered this year
Year 8	Biology Big Idea 10 part 1: Genes	Biology Big Idea 8 part 2: Organisms	Biology Big Idea 9 part 2: Ecosystems
Content	Physics Big Idea 1 part 2: Forces	Physics Big Idea 2 part 2: Electromagnets	Chemistry Big Idea 6 part 2: Reactions
	Chemistry Big Idea 7 part 2: Earth	Chemistry Big Idea 5 part 2: Matter	Revision and End of Year Assessment
	Physics Big Idea 4 part 1: Waves	Physics Big Idea 4 part 2: Waves	STEM Activities
			Physics Big Idea 3 part 2: Energy
			Biology Big Idea 10 part 2: Genes
Year 8	Graph skills	Graph skills	Graph skills
Skills	Extended writing	Extended writing	Extended writing
	Literacy	Literacy	Literacy
	Exam technique	Exam technique	Exam technique
Year 8 Key	Interim assessments on all Big Idea Part 1/2s	Interim assessments on all Big Idea Part 2s	Interim assessments on all Big Idea Part 2s
Points			End of Year Assessment on all content covered this year
Points			Cultural Capital Trip to Marwell Zoo
Year 9	Consolidation, revision and working scientifically	B1a Cell structure	B3b Digestive system (B3.1-3.3)
Content	through several investigative projects:	B3a Enzymes (B3.4 - B3.7)	B9 Respiration
	Practical skills	C1 Atomic Structure	P2 Energy transfer by heating
	Celebrating All Scientists	C2 The Periodic Table	Revision and assessment fortnight
	Forensics	P1 Conservation and dissipation of energy	
	Microbes		Consolidation and working scientifically
	Energy		



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Year 9 Skills	Investigative, presentation and practical skills Effective revision skills and exam technique Skills in working scientifically and application of knowledge to real-world situations	 Required Practicals covered: RP B1 Microscopy (using a microscope, rearranging equations) RP B3 Enzymes 	 Required Practicals covered: RP B3 Food tests P2 Specific Heat capacity (calculating gradients on a graph) Investigative and working scientifically skills
Year 9 Key Points	Celebrating Scientists project links to CC and SMSC KS4 Baseline assessment late October 2023 covering all topics covered in Y7 and 8	Interim block tests on topics covered	Interim block tests on topics covered Assessment fortnight in June 2024 End of Y9 test covering topics all KS4 topics covered to date