



**Key subject skills**

<b>WS 1.1</b> Understand how scientific methods and theories develop over time.	<b>WS 1.2</b> Use a variety of models such as representational, spatial, descriptive, computational and mathematical to solve problems, make predictions and to develop scientific explanations and understanding of familiar and unfamiliar facts.	<b>WS 1.3</b> Appreciate the power and limitations of science and consider any ethical issues which may arise.	<b>WS 1.4</b> Explain everyday and technological applications of science; evaluate associated personal, social, economic and environmental implications; and make decisions based on the evaluation of evidence and arguments.	<b>WS 1.5</b> Evaluate risks both in practical science and the wider societal context, including perception of risk in relation to data and consequences.	<b>WS 1.6</b> Recognise the importance of peer review of results and of communicating results to a range of audiences.		
<b>WS 2.1</b> Use scientific theories and explanations to develop hypotheses.	<b>WS 2.2</b> Plan experiments or devise procedures to make observations, produce or characterise a substance, test hypotheses, check data or explore phenomena.	<b>WS 2.3</b> Apply a knowledge of a range of techniques, instruments, apparatus, and materials to select those appropriate to the experiment.	<b>WS 2.4</b> Carry out experiments appropriately having due regard for the correct manipulation of apparatus, the accuracy of measurements and health and safety considerations.	<b>WS 2.5</b> Recognise when to apply a knowledge of sampling techniques to ensure any samples collected are representative.	<b>WS 2.6</b> Make and record observations and measurements using a range of apparatus and methods.	<b>WS 2.7</b> Evaluate methods and suggest possible improvements and further investigations.	
<b>WS 3.1</b> Presenting observations and other data using appropriate methods.	<b>WS 3.2</b> Translating data from one form to another.	<b>WS 3.3</b> Carrying out and represent mathematical and statistical analysis.	<b>WS 3.4</b> Representing distributions of results and make estimations of uncertainty.	<b>WS 3.5</b> Interpreting observations and other data (presented in verbal, diagrammatic, graphical, symbolic or numerical form), including identifying patterns and trends, making inferences and drawing conclusions.	<b>WS 3.6</b> Presenting reasoned explanations including relating data to hypotheses.	<b>WS 3.7</b> Being objective, evaluating data in terms of accuracy, precision, repeatability and reproducibility and identifying potential sources of random and systematic error.	<b>WS 3.8</b> Communicating the scientific rationale for investigations, methods used, findings and reasoned conclusions through paper-based and electronic reports and presentations using verbal, diagrammatic, graphical, numerical and symbolic forms.
<b>WS 4.1</b> Use scientific vocabulary, terminology and definitions.	<b>WS 4.2</b> Recognise the importance of scientific quantities and understand how they are determined.	<b>WS 4.3</b> Use SI units (eg kg, g, mg; km, m, mm; kJ, J) and IUPAC chemical nomenclature unless inappropriate.	<b>WS 4.4</b> Use prefixes and powers of ten for orders of magnitude (eg tera, giga, mega, kilo, centi, milli, micro and nano).	<b>WS 4.5</b> Interconvert units.	<b>WS 4.6</b> Use an appropriate number of significant figures in calculation.		



Year	Biology					Chemistry					Physics						
	Topic	Skills tested				Links	Topic	Skills tested				Links	Topic	Skills tested			
7	7B1. Cells and Animal Reproduction	1.1	2.1	3.1	4.1	<b>Links to prior learning</b> Year 6 ✓ Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals	7C1. Particles	2.1	3.1	4.1	<b>Links to prior learning</b> Year 5 ✓ Properties and changes of materials. ✓ Demonstrate that dissolving, mixing and changes of state are reversible changes. ✓ use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating	7P1. Forces and Motion	2.1	3.1	4.1	<b>Links to prior learning</b> Year 5 ✓ Forces Topic	
		1.2	2.2	3.2	4.2			4.2	2.2	4.2			2.2	4.2			
7	7B2. Plant Reproduction and Ecology	1.3	2.3		4.3	<b>How does this prepare students for future learning?</b> KS4 Topics: ✓ B1 Cells and transport ✓ B2 Human biology	7C2. Acids, Earth and Atmosphere	2.3		4.3	<b>How does this prepare students for future learning?</b> ✓ Changes in State and Separation Techniques are revisited in KS4 Topic C1. ✓ Atomic Structure and The Periodic Table	7P2. The Particle Model	2.3		4.3	<b>How does this prepare students for future learning?</b> Ideas such as mass and weight, Balanced forces, Density, floating and sinking, motion graphs to be revisited in Key stage 4 topic.	
			2.4		4.4			4.4	2.4				4.4	2.4			4.4
7	7B2. Plant Reproduction and Ecology			3.5	4.5	<b>How does this prepare students for future learning?</b> ✓ Give reasons for classifying plants and animals based on specific characteristics ✓ Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.	7C2. Acids, Earth and Atmosphere	1.5			<b>How does this prepare students for future learning?</b> ✓ Properties and Changes of Materials. ✓ Know that some materials will dissolve in liquid to form a solution.	7P2. The Particle Model				<b>How does this prepare students for future learning?</b> ✓ Properties and changes of materials	
			2.6		4.6			4.6	2.6					2.6			
7	7B2. Plant Reproduction and Ecology		2.7	3.7		<b>How does this prepare students for future learning?</b> ✓ B1 Cells and transport ✓ B4 Plant Biology ✓ B7 Environmental science	7C2. Acids, Earth and Atmosphere			3.8	<b>How does this prepare students for future learning?</b> KS4 Topics: ✓ C4 Chemical Changes Neutralisation and Salts. ✓ C9 Chemistry of the atmosphere, Global warming and Climate Change	7P2. The Particle Model			3.8	<b>How does this prepare students for future learning?</b> Ideas such as particles, kinetic theory, density, diffusion to be built on in Key stage 4.	
		1.1		3.1	4.1			4.1	2.1	3.1			4.1	2.1	3.1		4.1
7	7B2. Plant Reproduction and Ecology	1.2	2.2	3.2		<b>How does this prepare students for future learning?</b> ✓ B1 Cells and transport ✓ B4 Plant Biology ✓ B7 Environmental science	7C2. Acids, Earth and Atmosphere	1.2	2.2	4.2	<b>How does this prepare students for future learning?</b> ✓ C4 Chemical Changes Neutralisation and Salts. ✓ C9 Chemistry of the atmosphere, Global warming and Climate Change	7P2. The Particle Model	1.2	2.2	4.2	<b>How does this prepare students for future learning?</b> ✓ Properties and changes of materials	
			2.3	3.3	4.3			4.3	2.3					2.3			
7	7B2. Plant Reproduction and Ecology		2.4	3.4		<b>How does this prepare students for future learning?</b> ✓ B1 Cells and transport ✓ B4 Plant Biology ✓ B7 Environmental science	7C2. Acids, Earth and Atmosphere		2.4		<b>How does this prepare students for future learning?</b> ✓ C4 Chemical Changes Neutralisation and Salts. ✓ C9 Chemistry of the atmosphere, Global warming and Climate Change	7P2. The Particle Model		2.4	4.4	<b>How does this prepare students for future learning?</b> Ideas such as particles, kinetic theory, density, diffusion to be built on in Key stage 4.	
			2.5	3.5				4.4	2.5	3.5				2.5	3.5		
7	7B2. Plant Reproduction and Ecology			3.6	4.6	<b>How does this prepare students for future learning?</b> ✓ B1 Cells and transport ✓ B4 Plant Biology ✓ B7 Environmental science	7C2. Acids, Earth and Atmosphere		2.6	4.6	<b>How does this prepare students for future learning?</b> ✓ C4 Chemical Changes Neutralisation and Salts. ✓ C9 Chemistry of the atmosphere, Global warming and Climate Change	7P2. The Particle Model		2.6	4.6	<b>How does this prepare students for future learning?</b> Ideas such as particles, kinetic theory, density, diffusion to be built on in Key stage 4.	
			2.7	3.7				4.6	2.7	3.7				2.7	3.7		



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8	8B1. Diet, Digestion and Drugs	1.1	2.1	3.1	4.1	<b>Links to prior learning</b> Year 6 ✓ recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function ✓ describe the ways in which nutrients and water are transported within animals, including humans.	8C1. Periodic Table	1.1	2.1	3.1	4.1	<b>Links to prior learning</b> Year 5 ✓ Properties and changes of materials ✓ Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets	8P1. Light and Sound	1	2.1	3.1	4.1	<b>Links to prior learning</b> Year 6 ✓ Light	
		1.2	2.2	3.2				1.2	2.2		4.2			1	2.2		4.2		
		1.3	2.3		4.3			1.3	2.3	3.3	4.3				2	2.3		4.3	
		1.4	2.4			<b>How does this prepare students for future learning?</b> KS4 Topics: ✓ B2 Human biology ✓ B3 Infectious diseases ✓ B5 Co-ordination and control			2.4			<b>How does this prepare students for future learning?</b> KS4 topics: ✓ Topic C1. Atomic Structure and The Periodic Table. ✓ Topic C2 Structure and Bonding. ✓ Topic C7 Organic Chemistry. ✓ Topic C8 Chemical Analysis			2.4		4.4	<b>How does this prepare students for future learning?</b> Ideas such as properties of waves, reflection, refraction, measuring speed and ultrasound to be built on Key stage 4	
		1.5	2.5	3.5				1.5		3.5						3.5	4.5		
		1.6						1.6	2.6	3.6	4.6					2.6			4.6
			2.7	3.7					2.7	3.7						2.7			
											3.8								
8	8B2. Muscles, Bones and the Respiratory System	1.1	2.1	3.1	4.1	<b>Links to prior learning</b> Year 6 ✓ identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood	8C2. Chemical Reactions	1.1		3.1	4.1	<b>Links to prior learning</b> Year 5 ✓ Properties and changes of materials ✓ Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.	8P2. Energy		2.1		4.1	<b>Links to prior learning</b> N/A.	
		1.2	2.2	3.2				1.2	2.2		4.2				2.2				
		1.3	2.3	3.3	4.3			1.3	2.3	3.3	4.3				2.3		4.3		
		1.4	2.4		4.4	<b>How does this prepare students for future learning?</b> KS4 Topics: ✓ B2 Human biology		1.4	2.4	3.4		<b>How does this prepare students for future learning?</b> Links to 9C1 9C2: ✓ Chemical reactions and using word equations and balanced symbol equations. KS4 Topics: ✓ C4 Chemical Changes. ✓ Topic C8 Chemical Analysis. ✓ Topic 10 Using Resources, polymers composites and ceramics.		1	2.4		4.1	<b>How does this prepare students for future learning?</b> Ideas such as Stretching materials, air resistance and friction, thermal radiation, magnetism, generating electricity to be built on in Key stage 4	
		1.5		3.5	4.5			1.5	2.5						4				
		1.6	2.6	3.6	4.6			1.6	2.6	3.6	4.6					2.6	3.6		
			2.7	3.7					2.7	3.7						2.7	3.7		
											3.8						3.8		



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9	9B1. Photosynthesis and Respiration				Links to prior learning N/A.	9C1. Trends in the Periodic Table	2.1	3.1	4.1	Links to prior learning Year 8 C2 Chemical Reactions	9P1. Electricity	1	2.1	3.1	4.1	Links to prior learning Year 6 ✓ Electricity			
							2.2	3.2	4.2			1	2.2		4.2				
							2.3	3.3	4.3			1	2.3		4.3				
			1.4	2.4			How does this prepare students for future learning?  KS4 Topics: ✓ B1 Cells and Transport ✓ B4 Plant Biology		2.4	3.4		How does this prepare students for future learning?  KS4 Topics: ✓ C1 Atomic Structure and the Periodic Table. ✓ C4 Chemical Changes. Reactions of acids and Extraction of metals.		1	2.4			How does this prepare students for future learning?  Ideas such as current, voltage in circuits, static electricity, resistance, electromagnetism, electrical energy to be built on Key stage 4.	
				2.5	3.5	4.5			1.5	2.5	3.5				1		3.5		4.5
				2.6	3.6	4.6			1.6	2.6	3.6		4.6		1	2.6	3.6		4.6
				2.7	3.7				2.7	3.7						2.7			
			3.8					3.8						3.8					
9	9B2. Genetics and Biodiversity	1.1		3.1	4.1	Links to prior learning Year 6: ✓ recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents	9C2. Types of Chemical Reaction	1.1	2.1	3.1	4.1	Links to prior learning Topic 8C2. ✓ Chemical Reactions. Chemical and Physical Changes. Combustion. Ideas about conservation of mass.	9P2. Earth, Space and Forces	1.1			4.1	Links to prior learning Year 5 ✓ Earth and Space	
			2.2											4.2					
			1.3			4.3	How does this prepare students for future learning?  KS4 Topics: ✓ B2 Human Biology ✓ B5 Co-ordination and control ✓ B6 Inheritance and evolution		1.3	2.3	3.3				2.3	3.3	4.3	How does this prepare students for future learning?  Ideas such as Pressure, pressure in liquids, air pressure, moments, gravity and weight, sun stars and galaxies all to be built in Key stage 4	
			1.4			4.4			1.4	2.4	3.4					3.4	4.4		
				2.5	3.5	4.5			1.5	2.5	3.5				1.5				4.5
				2.6	3.6	4.6			1.6	2.6	3.6	4.6							4.6
				2.7	3.7					2.7	3.7						3.7		
				3.8					3.8						3.8				



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10	B1 Cells and Transport	2.1	3.1	4.1	<b>Links to prior learning</b> KS3 topics: ✓ 7B1 Cells and animal reproduction ✓ 7B2 Plant reproduction and ecology ✓ 9B1 Photosynthesis and respiration	C1 Atomic Structure and the Periodic Table	1.1	3.1	4.1	<b>Links to prior learning</b> KS3 Topics 7C1, 8C1 and 9C1: ✓ States of matter and Separation techniques, The Periodic Table, Atoms and Elements, Properties of Metals and Non metals. ✓ Trends in the Periodic Table.	P1 Energy	3.1	<b>Links to prior learning</b> Year 8 Energy topic such as Stretching materials, air resistance and friction, thermal radiation, magnetism, generating electricity to be built on Key stage 3.		
		1.2	2.2	3.2			1.2	4.2	1.2			2.2		1.2	2.2
		2.3	3.3	4.3			1.3	4.3	1.3			3.3		1.3	3.3
		2.4	4.4	1.4			3.4	4.4	1.4			3.4		4.4	3.4
		3.5	4.5	<b>How does this prepare students for future learning?</b> KS5 Topics: ✓ 3 Cell structures ✓ 4 Transport across membranes ✓ 5 Cell recognition and the immune system ✓ 6 Exchange ✓ 7 Mass transport									<b>How does this prepare students for future learning?</b> Stretching materials, air resistance and friction, magnetism, generating electricity to be built on in Key stage 5 Physics		
1.6	2.6	3.6	4.6		1.5						3.5				
2.7	3.7	3.8			1.6						3.7				
10	B2 Human Biology	1.1	2.1	3.1	4.1	<b>Links to prior learning</b> KS3 topics: ✓ 7B1 Cells and animal reproduction ✓ 8B1 Diet digestion and drugs ✓ 8B2 Muscles, bones and the respiratory system ✓ 8B3 Sweat investigation ✓ 9B2 Genetics and the biodiversity	C2 Bonding, Structure, and the Properties of Matter	1.1	4.1	<b>Links to prior learning</b> KS3 Topic: ✓ 8C1. The Periodic Table. Properties of Metals and non-metals.	P2 Electricity	3.1	<b>Links to prior learning</b> Current, voltage in circuits, static electricity, resistance, electromagnetism, electrical energy to be built on Key stage 3.		
		1.2	2.2	3.2	4.2			1.2	4.2			1.2		4.2	
		1.3	2.3	3.3	4.3			1.3	4.3			1.3		4.3	
		1.4	2.4	4.4	1.4			4.4	1.4			3.4		1.4	3.4
		3.5	4.5	<b>How does this prepare students for future learning?</b> KS5 Topics: ✓ 5 Cell recognition and the immune system ✓ 6 Exchange ✓ 7 Mass transport ✓ 8 DNA, genes and protein synthesis ✓ 14 Response to stimuli ✓ 15 Nervous co-ordination and muscles ✓ 16 Homeostasis								<b>How does this prepare students for future learning?</b> Current, voltage in circuits, static electricity, resistance, electromagnetism, electrical energy, I-V graphs, Electrical power energy to be built on Key stage 5 Physics			
1.5	2.5	3.5	4.5		1.5	3.5	4.5	1.5	3.5						
1.6	2.6	3.6	4.6		1.6	3.6									
2.7	3.7	3.8				3.7				3.7					
10	B3 Infectious Diseases	1.1	2.1	3.1	4.1	<b>Links to prior learning</b> KS3 topics: ✓ 8B2 Muscles bones and the respiratory system	C3 Quantitative chemistry	3.1	4.1	<b>Links to prior learning</b> KS3 Topic: ✓ 9C2. Types of Chemical Reaction and the idea of Conservation of mass. Using balanced symbol equations.	P3 Particle model of matter	4.1	<b>Links to prior learning</b> Ideas such as particles, kinetic theory, density, diffusion are built		
		2.2	3.2	4.2	2.2			3.2	4.2			2.2		3.2	
		1.3	2.3	3.3	4.3			1.3	2.3			3.3		4.3	1.3

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		1.4	2.4		4.4	How does this prepare students for future learning?			2.4	3.4	4.4	How does this prepare students for future learning?				from year 7P2 The Particle Model		
		1.5		3.5	4.5				1.5	2.5	3.5					4.4	How does this prepare students for future learning?	
		1.6	2.6	3.6	4.6				1.6	2.6	3.6	4.6				4.5		
			2.7	3.7		KS5 Topics: ✓ 5 Cell recognition and the immune system				2.7	3.7					4.6	Ideas such as particles, kinetic theory, density, diffusion are built from in Key stage 5 Physics	
					3.8						3.8							
10	B4 Plant Biology	1.1	2.1	3.1	4.1	Links to prior learning	C4 Chemical changes & Salts	1.1	2.1	3.1	4.1	Links to prior learning	P4 Atomic structure	1.1	2.1	3.1	4.1	Links to prior learning
			2.2					1.2	2.2	3.2	4.2			1.2		3.2		
			2.3		4.3	KS3 Topics: ✓ 7B2 Plant reproduction and ecology ✓ 9B1 Photosynthesis and respiration ✓ 9B3 Investigating the effect of light intensity		1.3	2.3	3.3	4.3	KS3 Topic 7C2 8C2 9C1 and 9C2: ✓ Neutralisation and Salts ✓ The Periodic Table and Types of Chemical Reactions ✓ Extraction of Metals and the Reactivity Series.				3.3		✓ Ideas such as atomic structure, chemical symbols to be built on from Year 8C1 ✓ Periodic Table
		1.4	2.4	3.4	4.4	How does this prepare students for future learning?		1.4	2.4	3.4	4.4	How does this prepare students for future learning?		1.4		3.4		How does this prepare students for future learning? Ideas such as radioactive decay, half-life, nuclear equations, fission, fusion to be built on Key Stage 5 Physics.
		1.5	2.5	3.5	4.5			1.5	2.5	3.5	4.5	Chemical Reactions and Redox equations are expanded in KS5.		1.5		3.5		
		1.6	2.6	3.6	4.6			1.6	2.6	3.6	4.6			1.6		3.6		
			2.7	3.7		KS5 Topics: ✓ 3 Cell structure ✓ 4 Transport across cell membranes ✓ 11 Photosynthesis			2.7	3.7						3.7		
					3.8						3.8					3.8		
10							C5 Energy changes	1.1	2.1	3.1	4.1	Links to prior learning						
								1.2	2.2	3.2	4.2	✓ KS3 Topic 9C2. Types of Chemical Reactions. ✓ Exothermic and Endothermic reactions.						
								1.3	2.3	3.3	4.3							
								1.4	2.4	3.4	4.4	How does this prepare students for future learning?						
								1.5	2.5	3.5	4.5							
								1.6	2.6	3.6	4.6	Energetics and Bond Enthalpies are expanded in KS5. Thermodynamics is introduced.						
									2.7	3.7								
											3.8							
11	B5 Co-ordination and Control	1.1	2.1	3.1	4.1	Links to prior learning	C6. The rate and extent of chemical change	1.1	2.1	3.1	4.1	Links to prior learning	P5 Forces		2.1		4.1	Links to prior learning
			2.2	3.2	4.2			1.2	2.2	3.2	4.2		1.2	2.2		4.2		
		1.3	2.3	3.3	4.3	KS3 Topics: ✓ 7B1 Cells and animal reproduction ✓ 7B2 Plant reproduction and ecology ✓ 8B1 Diet, digestion and drugs		1.3	2.3	3.3	4.3	KS3 Topic 9C2: ✓ Types of Chemical Reactions. Measuring Chemical Changes.			2.3		4.3	✓ Ideas such as mass and weight, Balanced forces, Density, floating and sinking, motion graphs to be built on from 7P1 Forces ✓ Pressure, pressure in liquids, air pressure, moments, gravity and weight to be



																	built on from 9P2 Earth, Space and Forces		
		1.4	2.4	3.4	4.4	How does this prepare students for future learning?		1.4	2.4	3.4	4.4	How does this prepare students for future learning?			2.4		4.4	How does this prepare students for future learning?  Mass and weight, scalar and vector quantities, moments, centre of mass, motion graphs Newtons Laws of Motion to be built on in KS5 Physics.	
		1.5	2.5	3.5	4.5			1.5	2.5	3.5	4.5			1.5		3.5			4.5
		1.6	2.6	3.6	4.6			1.6	2.6	3.6	4.6					2.6			4.6
			2.7	3.7						2.7	3.7					2.7			4.6
				3.8		KS5 Topics: ✓ 14 Responding to stimuli ✓ 15 Nervous co-ordination and muscles ✓ 16 Homeostasis					3.8								
11	B6 Inheritance and Evolution	1.1	2.1	3.1	4.1	Links to prior learning  KS3 topics: ✓ 9B2 Genetics and Biodiversity	C7 Organic chemistry	1.1			3.1	4.1	Links to prior learning  KS3 Topic: ✓ 8C1. The periodic Table, atoms Elements and Compounds.	P6 Waves	1.1			4.1	Links to prior learning  Properties of waves, reflection, refraction, measuring speed and ultrasound to be built on from 8P1 Light and Sound
		1.2	2.2	3.2	4.2				1.2	2.2	3.2	4.2				2.2	3.2	4.2	
		1.3		3.3	4.3				1.3	2.3	3.3	4.3						4.3	
		1.4	2.4	3.4	4.4	How does this prepare students for future learning?		1.4	2.4	3.4	4.4	How does this prepare students for future learning?  Organic Chemistry is expanded in KS5 to include many more functional groups and reaction mechanisms.					4.4	How does this prepare students for future learning?  Properties of waves, wave speed, the wave equation, refraction and total internal reflection to be built on KS5	
		1.5	2.5	3.5	4.5			1.5	2.5	3.5	4.5						4.5		
		1.6	2.6	3.6	4.6			1.6	2.6	3.6	4.6						4.6		
			2.7	3.7						2.7	3.7					2.7			4.6
				3.8		KS5 Topics: ✓ 8 DNA, genes and protein synthesis ✓ 9 Genetic diversity ✓ 10 Biodiversity ✓ 20 Gene expression ✓ 21 Recombinant DNA technology					3.8								
11	B7 Environmental Science	1.1	2.1	3.1	4.1	Links to prior learning  KS3 Topics: ✓ 7B1 Cells and animal reproduction ✓ 7B2 Plant reproduction and ecology ✓ 9B2 Genetics and Biodiversity	C8 Chemical analysis	1.1	2.1		3.1	4.1	Links to prior learning  KS3 Topic 8C1 8C2: ✓ The periodic table ✓ Atoms ✓ Elements and Compounds ✓ Chemical Reactions ✓ Gas tests.	P7 Magnetism and electromagnetism		2.1		4.1	Links to prior learning  Magnetism, generating electricity to be built from 8P2 Energy Electromagnetism, electrical energy to be built on from 9P2 Electricity.
		1.2	2.2	3.2	4.2				1.2	2.2		4.2				2.2		4.2	
		1.3	2.3	3.3	4.3				1.3	2.3								4.3	
		1.4	2.4	3.4	4.4	How does this prepare students for future learning?		1.4	2.4			How does this prepare students for future learning?  Chemical analysis is expanded in KS5 to include Instrumental techniques such as Mass Spectrometry, Infra-red, Chromatography and NMR.					4.4	How does this prepare students for future learning?  Alternating current, transformers, electromagnetism and electromagnetic induction to be built on Key stage 5 Physics.	
		1.5	2.5	3.5	4.5			1.5	2.5	3.5						4.5			
		1.6	2.6	3.6	4.6			1.6	2.6	3.6						4.6			
			2.7	3.7						2.7	3.7					3.8			
				3.8		KS5 Topics: ✓ 9 Genetic diversity ✓ 10 Biodiversity ✓ 13 Energy and ecosystems ✓ 18 Populations and evolution ✓ 19 Populations in ecosystems					3.8								
11						C9 Chemistry	1.1	2.1			4.1	Links to prior learning  KS3 Topic 7C2:	P8 Space physics (physics only)	1.1				Links to prior learning	
							1.2			3.2	4.2								
							1.3			3.3	4.3					1.3			

**SCIENCE**



	of the atmosphere					<ul style="list-style-type: none"> <li>✓ Earth and the Atmosphere.</li> <li>✓ The carbon cycle.</li> </ul>						Gravity and weight, sun stars and galaxies all to be built on from the 9P2 Earth, Space and Forces
	1.4			3.4	4.4	How does this prepare students for future learning?						How does this prepare students for future learning?
	1.5			3.5	4.5							
	1.6			3.6	4.6							
				3.7		Atmospheric effects of Combustion reactions of Alkanes are expanded in KS5.						
			3.8									