



## Science - 5 Year Programme of Study

Year	Time	Topic	Expected single lessons
7	Sept	Classification	10
	Autumn-Feb 1/2 term	Cells	11
	Autumn-Feb 1/2 term	Reproduction	9
	Autumn-Feb 1/2 term	Forces	10
	Autumn-Feb 1/2 term	Particles and Reactions	12
	Feb 1/2 term - Summer	Light and Sound	10
	Feb 1/2 term - Summer	Food and Digestion	9
	Feb 1/2 term - Summer	Separating Mixtures	12
8	Autumn-Feb 1/2 term	Disease	10
	Autumn-Feb 1/2 term	Variation	12
	Autumn-Feb 1/2 term	Acids and Alkalis	12
	Autumn-Feb 1/2 term	Respiration and photosynthesis	16
	Autumn-Feb 1/2 term	Electricity and Magnetism	12
	Feb 1/2 term - Summer	Atoms and Elements	10
	Feb 1/2 term - Summer	Energy	10
	Feb 1/2 term - Summer	Space	5
9	Autumn Rotation	CP4 - Waves	10
		CP5 - Electromagnetic Spectrum	10
		SB1 - Key concepts in Biology	20
		CC1 - States of Matter	10
		CC2 - Separating and Purifying Substances	10
	Spring Rotation	CP3 - Conservation of energy	16
		SB1 continued	6
		SB2 - Cells and Control	10
		CC3 - Atomic Structure	4
		CC4 - Periodic Table	6
	Summer Rotation	CC5 - Ionic Compounds	4
		CC6 - Covalent Compounds	4
		CC7 - Types of Substance	8
		CP12a - Particle Model (Density)	6
		CP13 - Springs and energy transfer	6
	SB2 Continued	12	

**Year 10 and 11 Combined Science  
Route**

Biology	Sept - Oct Year 10	CB3 - Genetics	16
	Nov - Dec Year 10	CB4 - Natural Selection and Genetic Modification	12
	Jan - Mar Year 10	CB5 - Health, Disease and Medicine	18
	Apr - Jun Year 10	CB6 - Plant Structure and Function	14
	Sept - Oct Year 11	CB7 - Animal Coordination and Control	14
	Nov - Dec Year 11	CB8 - Exchange and Transport in Animals	14
	Jan - Mar Year 11	CB9 - Ecosystems and Cycles	24
Chemistry	Sept - Dec - Year 10	CC8 - Acids and Alkalis	24
	Jan Year 10	CC9 - Calculations involving Masses	8
	Feb - Mar Year 10	CC10 - Electrolysis	10
	Mar - Apr Year 10	CC11 - Obtaining and Using Metals	10
	April - May Year 10	CC12 - Reversible Reactions	6
	June - July Year 10	CC13 - Groups in the Periodic table	12
	Sept - Oct Year 11	CC14 - Rates of reaction	10
	Oct - Nov Year 11	CC15 - Heat energy in Chemical reactions	6
	Nov - Jan Year 11	CC16 - Fuels	14
	Jan - Mar Year 11	CC17 - Earth and Atmosphere	10
Physics	Sept - Year 10	CP1 - Motion	10
	Oct - Nov - Year 10	CP2 - Forces and Motion	18
	Dec - Feb - Year 10	CP6 - Radioactivity	16
	Feb - Year 10	CP7 - Forces doing Work	2
	Mar - Year 10	CP8 - Forces and their Effects	6
	Sept - Dec - Year 11	CP9 - Electricity and Circuits	28
	Jan-Feb - year 11	CP10 - Magnetism and Motor Effect	6
	Mar - Year 11	CP11 - electromagnetic Induction	8
	Apr - May - Year 10	CP12 - Particle Model (Change of State and Energy)	8

### Year 10 and 11 Accelerated Route

Biology (Biology topics have additional content in each topic)	Sept - Oct Year 10	CB3 - Genetics	16
	Nov - Dec Year 10	CB4 - Natural Selection and Genetic Modification	12
	Jan - Mar Year 10	CB5 - Health, Disease and Medicine	18
	Apr - Jun Year 10	CB6 - Plant Structure and Function	14
	Sep - Oct Year 11	CB7 - Animal Coordination and Control	14
	Nov - Dec Year 11	CB8 - Exchange and Transport in Animals	14
	Jan - Mar Year 11	CB9 - Ecosystems and Cycles	24
Chemistry	Sept - Nov Year 10	SC8 - Acids and Alkalis	18
	Nov - Dec Year 10	SC9 - Calculations involving Masses	6
	Jan Year 10	SC10 - Electrolysis	6
	Jan - Feb Year 10	SC11 - Obtaining and Using Metals	6
	Feb - Mar Year 10	SC12 - Reversible Reactions	2
	Mar Year 10	SC13 - Transition Metals and Alloys	8
	Apr - May Year 10	SC14 - Quantitative Analysis	10
	May Year 10	SC15 - Dynamic Equilibrium and Gas Calculations	4
	June Year 10	SC16 - Chemical cells and Fuel Cells	2
	June Year 10	SC17 - Groups in the Periodic table	6
	June Year 10	SC18 - Rates of reaction	6
	Sept Year 11	SC19 - Heat energy in Chemical reactions	4
	Sept - Oct Year 11	SC20 - Fuels	8
	Oct - Nov Year 11	SC21 - Earth and Atmosphere	4
	Nov Year 11	SC22 - Hydrocarbons	2
	Dec - Jan Year 11	SC23 - Alcohols and Carboxylic Acids	8
	Jan - Feb Year 11	SC24 - Polymers	6
	Feb Year 11	SC25 - Tests for Ions	6
March Year 11	SC26 - Properties of Matter and nanoparticles.	4	
Physics (Topics SP6, 8, 9, 12 and 13 have additional content compared with Combined Science)	Sept Year 10	SP1 - Motion	4
	Oct - Nov Year 10	Sp2 - Forces and Motion	14
	Dec - Jan Year 10	SP4/5 - Further waves and Electromagnetic Spectrum	14
	Feb - Mar Year 10	SP6 - Radioactivity	14
	Apr - May Year 10	SP7 - Astronomy	10
	Sept Year 11	SP8 - Forces doing work	2
	Sept Year 11	SP9 - Forces and their Effects	3
	Oct - Dec Year 11	SP10 - Electricity and Circuits	24
	Jan Year 11	SP11 - Static Electricity	4
	Feb-Mar Year 11	SP12 - Magnetism and Motor Effect	6
	Mar - Apr Year 11	SP13 - Electromagnetic Induction	6
	May - June Year 10	SP14 - Particle model (change of state, energy and Gas laws)	8
	June - July Year 10	SP15 - Forces, Pressure and Extensions	4

Year 10 Option group follows a similar route to Acceleration, but with more lessons per topic to complete each unit