

Year 10 Combined Science Curriculum Overview

Year 10 Combined Science	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Skills	<p>Qualitative skills – Writing descriptions, writing explanations, forming predictions, evaluating experimental methodology, writing comparison</p> <p>Quantitative skills – Recalling and applying mathematical formula, plotting and analysing graphs, collecting and interpreting data</p>					
Knowledge	<p>CB1e-g – Cell Biology</p> <p>CB2 – Cells and control</p> <p>CP1 – Motion</p> <p>CC3-4 – Atomic structure & the periodic table</p>	<p>CP4 & 5 – Waves</p> <p>CB3 – Genetics</p> <p>CP2 & CP8a – Forces</p> <p>CC7c & CC5 – Metallic and ionic bonding</p> <p>CP6 – Radiation</p>		<p>CP7 & CP3d – Energy</p> <p>CB4 – Natural selection and genetic modification</p> <p>CB5 – Health, disease and the development of medicines</p> <p>CC8 – Acids & Alkalis</p> <p>CC6 & CC7a,b,d – Covalent bonding and bonding models</p> <p>CC9 – Conservation of mass</p>		
Alive and British Values	<p>We can Question</p> <p>We can Research</p> <p>We can Contribute</p>	<p>We can Question</p> <p>We can Research</p> <p>We can Contribute</p>	<p>We can Question</p> <p>We can Research</p> <p>We can Contribute</p>	<p>We can Question</p> <p>We can Research</p> <p>We can Contribute</p>		
Assessment	Rotation test 1		Rotation test 2			Mock exams
Careers	<p>Doctor/nurse (NHS)</p> <p>Veterinary science</p> <p>Dentistry</p> <p>Civil engineer</p> <p>Motion engineer</p> <p>Nuclear physicist</p> <p>Chemist</p>	<p>Civil/structural engineer</p> <p>Radio engineer</p> <p>Genealogist</p> <p>Steel worker/ metal worker</p> <p>Nuclear physicist</p> <p>Radiation supervisor</p> <p>Radiotherapist</p>		<p>Theme park engineer/engineer</p> <p>Botanist/archaeologist</p> <p>Palaeontologist</p> <p>Doctor/nurse (NHS workers)</p> <p>Cleaners</p> <p>Chemists/pharmacist</p> <p>Chemical engineer</p>		

Year 11 Combined Science Curriculum Overview

Year 11 Combined Science	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6	
Skills	Qualitative skills – Writing descriptions, writing explanations, forming predictions, evaluating experimental methodology, writing comparison Quantitative skills – Recalling and applying mathematical formula, plotting and analysing graphs, collecting and interpreting data						
Knowledge	CB6 – Plant structures and their functions CP9 - Electricity CC10-12 – Electrolysis and extraction methods	CB7 – Animal coordination, Control and Homeostasis CP12-13 – Specific heat capacity and materials CC13, 14 & 15 – The periodic table & reactivity series	CB8 – Exchange and transport in Animals CB9 – Ecosystems and material cycles CC16-17 – Fuels, combustion & Earth's atmosphere			END OF COURSE	
Alive and British Values	We can Question We can Research We can Contribute	We can Question We can Research We can Contribute	We can Question We can Research We can Contribute				
Assessment		Mock exam		Mock exam		Final exams	
Careers	Botanist Ore mining and extraction Alternative fuels Electrician National grid	Veterinary science Doctor/nurses – NHS Alternative fuel research/renewables Chemical engineer	Doctorate/PHD research Plastics industries/Alternative materials Alternative fuels Climate control Agriculture/Botanist				

Year 10 Separate Science Curriculum Overview

Year 10 Separate Science		Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Skills		Qualitative skills – Writing descriptions, writing explanations, forming predictions, evaluating experimental methodology, writing comparison Quantitative skills – Recalling and applying mathematical formula, plotting and analysing graphs, collecting and interpreting data					
Knowledge	Biology	SB1e-g Enzymes SB2 – Cells and control	SB3 – Genetics		SB4 – Natural selection and genetic modification SB5 – Health, Disease and the history of medicines		
	Chemistry	SC3 – 4 – Atomic structure and periodic table SC5 – 7 - Bonding	SC8 - Acids and alkalis SC9 – Calculations using masses		SC10 - SC11 – Extracting metals		
	Physics	SP1 - Motion SP2 – Forces and motion	SP4 - Waves SP5i – Electromagnetic waves pt1		SP5ii – Electromagnetic waves pt2 SP6 – Radioactivity SP7 - Astrophysics		
Alive and British Values		We can Question We can Research We can Contribute	We can Question We can Research We can Contribute		We can Question We can Research We can Contribute		
Assessment		Rotation test 1		Rotation test 2			Mock exams
Careers		Doctor/nurse (NHS) Veterinary science Nutritionist Dentistry Civil engineer Motion engineer Nuclear physicist Chemist	Civil/structural engineer Radio engineer Genealogist Radiation supervisor Radiotherapist Cleaners Chemists/pharmacist Chemical engineer		Botanist/archaeologist Palaeontologist Doctor/nurse (NHS workers) Steel worker/ metal worker Nuclear physicist		

Year 11 Separate Science Curriculum Overview

Year 11 Separate Science		Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Skills		<p>Qualitative skills – Writing descriptions, writing explanations, forming predictions, evaluating experimental methodology, writing comparison</p> <p>Quantitative skills – Recalling and applying mathematical formula, plotting and analysing graphs, collecting and interpreting data</p>					
Knowledge	Biology	SB6 – Plant structures and their functions	SB7 – Animal coordination, control and homeostasis SB8 – Exchange and transport in animals	SB9 – Ecosystems and material cycles			
	Chemistry	SC12 & SC13 Metals & Extraction SC14-SC16 – Quantitative analysis, reactions and fuels	SC17 - Groups in the periodic table SC18 & SC19 - Rates and energy changes SC20 & SC21 - Fuels and the Earth's atmosphere SC22 – Hydrocarbons	SC23 – Alcohols and carboxylic acids SC24 - Polymers SC25 – Qualitative tests SC26 – Bulk and surface properties of matter			
	Physics	SP8 & SP9 – Forces and energy SP10 – Electrical circuits	SP11 – Static electricity SP12 – Magnetism and the motor effect SP13 – Electromagnetic induction	SP14 – Particle model SP15 – Forces and matter			
Alive and British Values		We can Question We can Research We can Contribute	We can Question We can Research We value Trust and Truth	We can Question We can Research We value Trust and Truth			
Assessment		Rotation test 1		Rotation test 2			Mock exams
Careers		Botanist Ore mining and extraction Alternative fuels Electrician	Veterinary science Doctor/nurses – NHS Alternative fuel research/renewables National grid, electrical engineer	Doctorate/PHD research Plastics industries/Alternative materials Agriculture/Botanist			