



Science KEY STAGE 3 CURRICULUM MAP

Curriculum Overviews	Autumn 1 7 Weeks	Autumn 2 7 Weeks	Spring 1 6 Weeks	Spring 2 6 Weeks	Summer 1 6 Weeks	Summer 2 7 Weeks
Year 7 (New Curriculum being implemented and delivered over the year)	Chemistry / Physics : <ul style="list-style-type: none"> • Particles • Energy 	Physics / Biology: <ul style="list-style-type: none"> • Energy • Cells 	Chemistry / Physics: <ul style="list-style-type: none"> • Periodic Table • Forces 	Physics / Biology: <ul style="list-style-type: none"> • Forces • Photosynthesis and Respiration 	Chemistry / Physics: <ul style="list-style-type: none"> • Acids and Alkalis • Space 	Physics / Biology: <ul style="list-style-type: none"> • Space • Reproduction
Year 8 (Current Curriculum – new curriculum to be developed during summer term)	Chemistry / Physics : <ul style="list-style-type: none"> • Chemical Reactions • Forces in Action 	Physics / Biology: <ul style="list-style-type: none"> • Forces in Action • Life Support 	Chemistry / Physics : <ul style="list-style-type: none"> • Earth Science • Waves 	Physics / Biology: <ul style="list-style-type: none"> • Waves • Keeping Healthy 	Chemistry / Physics : <ul style="list-style-type: none"> • Material Science • Electricity 	Physics / Biology: <ul style="list-style-type: none"> • Electricity • Changing Environments



<p>Year 9 (Current Curriculum – new curriculum being developed during autumn term and launched January 2025)</p>	<p>Chemistry / Physics :</p> <ul style="list-style-type: none">• Formula and Equations• Magnetism	<p>Physics / Biology:</p> <ul style="list-style-type: none">• Magnetism• Genetics	<p>Start AQA Combined GCSE science - new curriculum currently under development</p>	<p>AQA Combined GCSE science - new curriculum currently under development</p>	<p>AQA Combined GCSE science - new curriculum currently under development</p>	<p>AQA Combined GCSE science - new curriculum currently under development</p>
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Science KEY STAGE 4 CURRICULUM MAP

Curriculum Overview	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 10	<p>Biology Key concepts recap. Cell division and growth.</p> <p>Chemistry Key concepts recap. Bonding and types of substance.</p> <p>Physics Key concepts revision, Newton's laws and the physics of falling</p>	<p>Biology Nervous system. Inheritance and DNA.</p> <p>Chemistry Calculation involving masses. States of matter and mixtures.</p> <p>Physics Car safety and collisions.</p>	<p>Biology Continue Inheritance and DNA. Natural Selection and Evolution.</p> <p>Chemistry Continue states of matter and mixtures. Chemical changes I - Acids.</p> <p>Physics Waves and the electromagnetic spectrum.</p>	<p>Biology Genetic modification. Health, disease and immune system.</p> <p>Chemistry Chemical changes II - Electrolytic processes.</p> <p>Physics Continue waves and the electromagnetic spectrum, The atom, isotopes and radioactivity.</p>	<p>Biology Continue Health, disease and immune system.</p> <p>Chemistry Extracting metals</p> <p>Physics Continue atoms, isotopes and radioactivity, Introducing energy and thermal energy.</p>	<p>Biology Medical Developments.</p> <p>Chemistry Continue Extracting metals.</p> <p>Physics Continue introducing energy and thermal energy.</p>
Year 11	<p>Biology Ecosystems and Biodiversity. Nutrient cycles.</p> <p>Chemistry Groups in the periodic table. Rates of reaction.</p> <p>Physics Electricity and circuits</p>	<p>Biology Plant Structure and Function. Respiratory System.</p> <p>Chemistry Continue rates of reaction. Energy changes.</p> <p>Physics Continue electricity and circuits, Pressure and Density</p>	<p>Biology Continue Respiratory System. Animal coordination, control and homeostasis.</p> <p>Chemistry Reversible reactions and equilibria.</p> <p>Physics Continue pressure and density, Hooke's law</p>	<p>Biology Continue Animal coordination, control and homeostasis.</p> <p>Chemistry Fuels and Earth Science/Atmosphere.</p> <p>Physics Magnetism and electromagnetism</p>	<p>Biology Walking talking mocks, targeted topic revision</p> <p>Chemistry Walking talking mocks, targeted topic revision</p> <p>Physics Walking talking mocks, targeted topic revision</p>	<p>Biology Walking talking mocks, targeted topic revision</p> <p>Chemistry Walking talking mocks, targeted topic revision</p> <p>Physics Walking talking mocks, targeted topic revision</p>

Texts, Exam Boards, and Useful Websites:

Key Stage 4 (Year 10 - 11)



GCSE Combined Science - exam board is Edexcel.

Revision guides available through school at a discount - CGP Books

BBC Bitesize [GCSE Combined Science - Edexcel - BBC Bitesize](#)

Physics and Maths tutor - has all 3 sciences [Physics & Maths Tutor \(physicsandmathstutor.com\)](http://physicsandmathstutor.com)



Science KEY STAGE 5 CURRICULUM MAP

Curriculum Overviews	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 12	Biology Module 2 Foundations in Biology 2.1.1 Cell structure 2.1.2 Biological molecules 2.1.3 Nucleotides and nucleic acids. 2.1.4 Enzymes	Biology 2.1.5 Biological membranes 2.1.6 Cell division, cell diversity and cellular organisation. Module 3 Exchange and Transport 3.1.1 Exchange surfaces	Biology 3.1.2 Transport in animals Module 4 Biodiversity, evolution and disease 4.1.1 Communicable diseases	Biology 3.1.3 Transport in plants 4.2.2 Classification and evolution 4.1.1 Communicable diseases	Biology 4.2.1 Biodiversity Module 5 Communication, homeostasis and energy 5.2.1 Photosynthesis	Biology Continue 4.2.1 Biodiversity Continue 5.2.1 Photosynthesis
	Chemistry 2.1.3 Amount of substance 2.2.1 Electron structure 2.2.2 Bonding and structure	Chemistry Continue 2.1.3 Amount of substance 2.1.4 Acids 2.1.5 Redox 4.1.1 Basic concepts of organic chemistry 4.1.2 Alkanes	Chemistry Continue 4.1.2 Alkanes 4.1.3 Alkenes Continue 2.1.5 Redox 3.1.1 Periodicity	Chemistry 3.1.2 Group 2 3.1.3 The halogens 3.2.1 Enthalpy changes 4.2.1 Alcohols 4.2.2 Haloalkanes 4.2.3 Organic synthesis	Chemistry 4.2.4 Analytical Techniques continue 3.2.1 Enthalpy changes 3.2.2 Reactions rates 3.2.3 Chemical Equilibrium	Chemistry Continue 3.2.3 Chemical equilibrium Continue 4.2.4 analytical techniques
	Physics 2 Foundations of physics 3.1 motion 4.1 Charge and Current 4.2 Energy, Power, and Resistance	Physics Continue 3.1 motion 3.2 Forces in action 4.3 Electrical Circuits	Physics Continue 3.2 forces in action 3.3 Work, energy and power 4.4 Waves	Physics Continue 3.3 Work, energy and power 3.4 materials 4.5 Quantum Physics	Physics Continue 3.4 materials 3.5 Laws of motion and momentum 6.1 Capacitors	Physics Continue 3.5 Laws of motion and momentum 5.1 Thermal physics Continue 6.1 Capacitors



Year 13	Biology	Biology	Biology	Biology		
	5.2.2 Respiration	5.1.3 Neuronal communication	Continue 5.1.4 hormonal communication	5.1.5 Plant and animal responses		
	5.1.1 Communication and homeostasis	5.1.4 Hormonal communication	Continue 6.1.2 pattern of inheritance	6.2.1 Cloning and biotechnology		
	5.1.2 Excretion	6.1.1 Cellular control				
Module 6 Genetics, evolution and ecosystems	6.1.2 Patterns of inheritance					
6.3.1 Ecosystems						
6.3.2 Populations and sustainability						
Chemistry	Chemistry	Chemistry	Chemistry	Chemistry		
5.2.1 Energy and entropy	5.1.2 How far? (Equilibrium)	Continue 5.1.3 Acids, bases and buffers	continue 5.2.3 REDOX and electrode potentials			
5.1.1 How fast? (Rates)	5.1.3 Acids, bases and buffers	5.2.3 REDOX and electrode potentials	5.3.1 Transition metals			
6.1.1 Aromatic compounds	continue 6.1.2 Carbonyl Compounds	Continue 6.2.1 Amines	5.3.2 Qualitative analysis			
6.1.2 Carbonyl Compounds	6.1.3 carboxylic acids and esters	6.2.2 Amino acids, amides and chirality	6.2.5 Organic synthesis			
	6.2.1 Amines	6.2.3 Polyesters and polyamides	6.3.1 Chromatography			
Physics	Physics	6.2.4 Carbon carbon bond formation	6.3.2 Spectroscopy			
Continue 5.1 thermal physics	Continue 5.2 circular motion	Physics	Physics			
5.2 Circular motion	5.3 Oscillations	5.4 Gravitational fields	5.5 stars and cosmology			
6.2 Electric Fields	6.3 Electromagnetism	6.4 Nuclear and Particle Physics	6.5 Medical Imaging			

Texts, Exam Boards, and Useful Websites:



Uplearn for all three disciplines

Exam board - OCR A for all three Sciences

Texts - CGP A Level Revision Guide in each Science.

Physics and Maths tutor - has all 3 sciences [Physics & Maths Tutor \(physicsandmathstutor.com\)](https://www.physicsandmathstutor.com)