

## Science

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	Introduction to science Energy Costs	Energy Transfer Universe Movement Cells	Particle Model Gravity	Interdependence Plant reproduction Elements	Potential difference and resistance Current	Acids and alkalis Careers in physics
Year 8	Human reproduction Variation Evolution Work Heating and cooling	Separating mixtures Periodic Table Contact forces Pressure	Breathing Earth Structure Climate Earth resources	Magnetism Electromagnets Digestion	Metals and non- metals	Respiration Photosynthesis Careers in biology
Year 9	Sound Light Wave effects Wave properties	Types of reaction Chemical energy Inheritance Careers in chemistry	Energy stores and pathways	Atomic structure Balancing equations	Using and understanding the periodic table	Cells
Year 10	Electric circuits Molecules and matter	Electricity in the home Radioactivity Forces in balance	Organisation and the digestive system Transport in animals and plants Structure and bonding	Communicable diseases Preventing and treating diseases Chemical calculations	Non-communicable diseases Photosynthesis Chemical changes Electrolysis	Respiration The human nervous system Energy changes Rates and equilibrium

## Science

Year 11	Motion Force and motion <i>Force and pressure</i> Wave properties	Electromagnetic waves <i>Light</i> Electromagnetism <i>Space</i>	Hormonal coordination <i>Homeostasis in action</i> Reproduction Crude oil and fuels <i>Organic reactions</i> <i>Polymers</i>	Variation and evolution Genetics and evolution Adaptations, interdependence and competition Chemical analysis The Earth's atmosphere	Organising an ecosystem Biodiversity and ecosystems The Earth's resources <i>Using our resources</i>	
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## Science

Year 12	<p><b>Chemistry</b> Atomic Structure Amount of Substance Bonding</p>	<p><b>Chemistry</b> Energetics Kinetics Introduction to organic chemistry</p>	<p><b>Chemistry</b> Equilibria Alkanes Halogenoalkanes</p>	<p><b>Chemistry</b> Redox equations Group 2 metals Alkenes Alcohols</p>	<p><b>Chemistry</b> Group 7 Periodicity Organic analysis</p>	<p><b>Chemistry</b> Thermodynamics Optical isomerism Aldehydes and ketones</p>
	<p><b>Biology</b> Biological molecules Cell structure</p>	<p><b>Biology</b> Nucleic acids Transport across cell membranes</p>	<p><b>Biology</b> Cell recognition and the immune system Exchange Mass transport DNA, Genes and protein synthesis</p>	<p><b>Biology</b> Genetic diversity and adaptation Biodiversity Photosynthesis</p>	<p><b>Biology</b> Respiration Response to stimuli</p>	<p><b>Biology</b> Energy and ecosystems</p>
	<p><b>Physics</b> Forces Momentum</p>	<p><b>Physics</b> Work, energy and power Materials Electric current</p>	<p><b>Physics</b> Direct current circuits Waves</p>	<p><b>Physics</b> Optics Matter and Radiation</p>	<p><b>Physics</b> Quarks and Leptons Quantum Phenomena</p>	<p><b>Physics</b> Motion in a circle Simple harmonic motion</p>
	<p><b>Applied Science</b> Cells Waves in communication</p>	<p><b>Applied Science</b> Cells Periodicity and Elements Planning an investigation</p>	<p><b>Applied Science</b> Enzymes Diffusion Analysis</p>	<p><b>Applied Science</b> Plants Investigations of fuels</p>	<p><b>Applied Science</b> Investigation of circuits</p>	<p><b>Applied Science</b> Investigation of chromatography Investigation of cooling curves</p>

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Year 13	<p><b>Chemistry</b> Acids and bases Rate equations Carboxylic acids</p>	<p><b>Chemistry</b> Electrode potentials Transition metals Aromatic chemistry Amines Amino acids and DNA</p>	<p><b>Chemistry</b> Reactions of ions in aqueous solutions Equilibrium NMR analysis</p>	<p><b>Chemistry</b> Properties of period 3 oxides Chromatography</p>	<p><b>Chemistry</b> Organic synthesis</p>		
	<p><b>Biology</b> Homeostasis Inherited change Nervous coordination and muscles</p>	<p><b>Biology</b> Populations and evolution Gene expression</p>	<p><b>Biology</b> Populations in ecosystems</p>	<p><b>Biology</b> Recombinant DNA technology</p>	<p><b>Biology</b> Revision</p>		
	<p><b>Physics</b> Thermal physics Gasses Gravitational fields</p>	<p><b>Physics</b> Electric Fields Capacitors Magnetic fields</p>	<p><b>Physics</b> EM Induction Radioactivity Nuclear Decay</p>	<p><b>Physics</b> Optional Unit</p>	<p><b>Physics</b> Optional Unit</p>		
	<p><b>Applied Science</b> Musculoskeletal disorders</p>	<p><b>Applied Science</b> Lymphatic system</p>	<p><b>Applied Science</b> Titrations</p>	<p><b>Applied Science</b> Scientific skills Digestive system</p>	<p><b>Applied Science</b> Diet Scientific skills</p>		