

Year 9 Science Scheme of Learning overview 2022-2023

Term	Unit	Content covered within unit
Autumn 1	Metals and acids	<ul style="list-style-type: none"> Acids and alkalis Indicators and pH Neutralisation Making salt Acids and metals Acids and oxygen Metals and water Metal displacement reactions
	Metals and Acids assessment	
	Cells revisited	<ul style="list-style-type: none"> Electron and light microscopes Plant, animal and specialised cells Inside bacteria Enzymes and nutrition Enzyme action Enzyme activity Transporting substances
	Cells revisited assessment	
Autumn 2	Energy	<ul style="list-style-type: none"> Food and fuels Energy adds up Energy stores and transfers Energy efficiency Energy and temperature Energy transfers: particles Energy transfers: radiation Stored energy Resources: now renewable Resources: Renewable Work, energy and machines
	Energy assessment	
Spring 1	Ecosystems	<ul style="list-style-type: none"> Food chains and food webs Disruption of food chains Ecosystems Abiotic factors and communities Biotic factors and communities Parasitism and mutualism Biodiversity and humans Preserving biodiversity
	Ecosystems assessment	
	Separation techniques	<ul style="list-style-type: none"> States of matter and changes of state revisited Mixtures Solutions Solubility Filtration and crystallisation

		<ul style="list-style-type: none"> • Paper chromatography • Distillation • Drinking water
Spring 2	Separation technique assessment	
	Periodic table	<ul style="list-style-type: none"> • Metals and non metals • Structure of the atom • Atomic number and mass number • Isotopes • Atomic number and periodic table • Groups and periods • Electron configuration • The elements of group 1 • The elements of group 7 • The elements of group 0
	Periodic table assessment	
Summer 1	Revision for end of year /Key stage 3 test	<ul style="list-style-type: none"> • Metals and acids • Cells revisited • Energy • Ecosystems • Separation techniques • Periodic table • Year 7 topic content • Year 8 topic content
Summer 2	End of Year 9/ End of Key Stage 3 Test	
	Extra Unit Health and Disease	<ul style="list-style-type: none"> • A hidden world • Under attack • Stopping the spread • Self defence • Beating infections –Vaccines • Beating infections – Antibiotics • COVID 19
	Investigation Skills	<ul style="list-style-type: none"> • Practical planning, • Carrying out investigations, • Analysis and conclusions • Evaluations
	Project Work	<ul style="list-style-type: none"> • Independent learning project • Research skills • Demonstration of communication skills

Topics are covered in different orders by staff to avoid issues with practical requisitions and classes being shared between staff

A summary lesson, quality of written communication 6 mark question practice and a knowledge test accompany each topic.

After End of Key Stage test has been complete activities are teachers choice