

	Term	Topic	Learning Outcomes	Assessment
Year 9			To know about:	
	Term 3	<p>SC1 States of matter (Paper 1)</p> <p>SC2 Methods of Separating and Purifying substances (Paper 1)</p>	<p>✓ SC1 a - The states of matter</p> <p>✓ SC2a - Mixtures</p> <p>✓ SC2b - Filtration and crystallisation</p> <p>✓ SC2c - Paper chromatography</p> <p>✓ SC2d - Distillation</p> <p>✓ SC2d - Core practical: Investigating inks</p> <p>✓ SC2e – Drinking water</p> <p>✓ SC1-2 – Revision activities</p>	SC1-2 – End of topic test

	Term	Topic	Learning Outcomes	Assessment
Year 10	Term 1	SC3 Atomic structure (Paper 1 and 2) SC2 The Periodic table (Paper 1 and 2)	To know about: ✓ SC3a - The structure of the atom ✓ SC3b – Atomic number and mass number ✓ SC3c - Isotopes ✓ SC4a – Elements and the periodic table ✓ SC4b – Atomic number and the periodic table ✓ SC4c – Electronic configurations and the periodic table ✓ SC3-4 – Revision activities	SC3-4 – End of topic test
		SC5 Ionic bonding (Paper 1 and 2) SC6 Covalent bonding (Paper 1 and 2) SC7 Types of substances (Paper 1 and 2)	To know about: ✓ SC5a – Ionic bonds ✓ SC5b – Ionic lattices ✓ SC5c – Properties of ionic compounds ✓ SC6a – Covalent bonds ✓ SC7a – Molecular compounds ✓ SC7b – Allotropes of carbon ✓ SC7c – Properties of metals ✓ SC7d – Bonding models ✓ SC5-7 – Revision activities	SC5-7 – End of topic test

	Term	Topic	Learning Outcomes	Assessment
Year 10	Term 2	SC8 Acids and alkalis (Paper 1)	<p>To know about:</p> <ul style="list-style-type: none"> ✓ SC8a – Acids, alkalis and indicators ✓ SC8b – Looking at acids ✓ SC8c – Bases and salts ✓ SC8c – Core practical: Preparing copper sulfate ✓ SC8d – Alkalis and balancing equations ✓ SC8d – Core practical: Investigating neutralisation ✓ SC8e – Alkalis and neutralisation ✓ SC8f – Reactions of acids with metals and carbonates ✓ SC8g – Solubility ✓ SC8 – Revision activities 	SC8 – End of topic test
		SC9 Calculations involving masses (Paper 1 and 2)	<p>To know about:</p> <ul style="list-style-type: none"> ✓ SC9a – Masses and empirical formulae ✓ SC9b – Conservation of mass ✓ SC9c – Moles ✓ SC9 – Revision activities 	SC9 – End of topic test

	Term	Topic	Learning Outcomes	Assessment
Year 10	Term 3	SC10 Electrolytic processes (Paper 1)	<p>To know about:</p> <ul style="list-style-type: none"> ✓ SC10a – Electrolysis ✓ SC10a – Core practical: Electrolysis of copper sulfate ✓ SC10b – Products of electrolysis 	SC10-13 – End of topic test
		SC11 Obtaining and using metals (Paper 1)	<ul style="list-style-type: none"> ✓ SC11a – Reactivity ✓ SC11b – Ores ✓ SC11c – Oxidation and reduction ✓ SC11d – Life cycle assessment and recycling 	
		SC12 Reversible reactions and equilibria (Paper 1)	<ul style="list-style-type: none"> ✓ SC12a – Dynamic equilibrium 	
		SC13 Transition metals, alloys and corrosion (Paper 1)	<ul style="list-style-type: none"> ✓ SC13a – Transition metals ✓ SC13b – Corrosion ✓ SC13c – Electroplating ✓ SC13d – Alloying ✓ SC13e – Uses of metals and their alloys 	
			<ul style="list-style-type: none"> ✓ SC10-13 – Revision activities ✓ SC1-9 – Year 10 exam revision activities 	End of Year 10 Exam

End of year assessment

This will include topics SC1-9

Misconceptions will be addressed as part of the end of year assessment review process

	Term	Topic	Learning Outcomes	Assessment
Year 11	Term 1	<p>SC14 Quantitative analysis (Paper 1)</p> <p>SC15 Dynamic equilibria, Calculations involving volumes of gases (Paper 1)</p> <p>SC16 Chemical cells and fuel cells (Paper 1)</p>	<p>To know about:</p> <ul style="list-style-type: none"> ✓ SC14a – Yields ✓ SC14b – Atom economy ✓ SC14c – Concentrations ✓ SC14d – Titrations and calculations ✓ SC14d – Core practical: Acid – alkali titration ✓ SC14e – Molar volume of gases ✓ SC15a – Fertilisers and the Haber process ✓ SC15b – Factors affecting equilibrium ✓ 16a – Chemical cells and fuel cells ✓ SC1-16 – Year 11 mock exam revision activities 	Year 11 Mock exam
	<p>Year 11 Mock exams This will include topics SC1-14 Misconceptions will be addressed as part of the end of year assessment review process</p>			

	Term	Topic	Learning Outcomes	Assessment
Year 11	Term 2	SC17 Groups in the periodic table (Paper 2) SC18 Rates of reaction (Paper 2) SC19 Heat energy changes in chemical reactions (Paper 2)	To know about: ✓ SC17a – Group 1 ✓ SC17b – Group 7 ✓ SC17c – Halogen reactivity ✓ SC17d – Group 0 ✓ SC18a - Rates of reaction ✓ SC18b - Factors affecting rates of reaction ✓ SC18b – Core practical: Investigating rates of reaction ✓ SC18c – Catalysts and rates of reaction ✓ SC19a – Exothermic and endothermic reactions ✓ SC19b – Energy changes in chemical reactions ✓ SC17-19 – Revision activities	SC17-19 – End of topic test
		SC20 Fuels (Paper 2) SC21 Earth and atmospheric science (Paper 2)	To know about: ✓ SC20a – Hydrocarbons ✓ SC20b – Fractional distillation of crude oil ✓ SC20c – Alkanes ✓ SC20d – Complete and incomplete combustion ✓ SC20e – Combustible fuels and pollution ✓ SC20f – Breaking down hydrocarbons ✓ SC21a – The early atmosphere ✓ SC21b – The changing atmosphere ✓ SC21c - The atmosphere today ✓ SC21d – Climate change ✓ SC20-21 – Revision activities	SC20-21 – End of topic test

	Term	Topic	Learning Outcomes	Assessment
Year 11	Term 3	SC22 Hydrocarbons (Paper 2) SC23 Alcohols and carboxylic acids (Paper 2) SC24 Polymers (Paper 2)	To know about: ✓ SC22a – Alkanes and alkenes ✓ SC22b – Reactions of alkanes and alkenes ✓ SC23a – Ethanol production ✓ SC23b – Alcohols ✓ SC23b – Core practical: The combustion of alcohols ✓ SC23c – Carboxylic acids ✓ SC24a – Addition polymerisation ✓ SC24b – Polymer properties and uses ✓ SC24c – Condensation polymerisation ✓ SC24d – Problems with polymers ✓ SC22-24 – Revision activities	SC22-24 – End of topic test
		SC25 Qualitative analysis: Tests for ions (Paper 2) SC26 Bulk and surface properties of matter including nanoparticles (Paper 2)	To know about: ✓ SC25a – Flame tests and photometry ✓ SC25b – Tests for positive ions ✓ SC25c – Tests for negative ions ✓ SC25c – Core practical: Identifying ions ✓ SC26a – Choosing materials ✓ SC21b – Composite materials ✓ SC26c – Nanoparticles ✓ SC25-26 – Revision activities	SC25-26 – End of topic test

Exam dates:Paper 1 exam dates:

Biology – 19th May 2021

Chemistry – 24th May 2021

Physics – 27th May 2021

Paper 2 exam dates:

Biology – 14th June 2021

Chemistry – 17th June 2021

Physics – 22nd June 2021