

Subject: Chemistry (year 10)

Long-term plan

Week	Month	Learning Intentions and/or Key Questions
Aut1-1	September	<u>Chemistry: Quantitative Chemistry:</u> <ul style="list-style-type: none"> • Conservation of mass and balancing equations • Moles • Limiting reactants
Aut1-2		
Aut1-3		
Aut1-4		
Aut1-5	October	<ul style="list-style-type: none"> • Concentrations of solutions • Molar gas volume (TRIPLE) • Percentage yield and atom economy (TRIPLE)
Aut1-6		
Aut1-7		
		<u>Revision, Assessment and Feedback</u>
		Half term holiday
Aut2-1	November	<u>Chemistry- Chemical changes</u> <ul style="list-style-type: none"> • Neutralisation and pH scale • Titrations (TRIPLE) • Strong and weak acids • Reactions with acids (RP) • The reactivity series • Extracting metals • Electrolysis (RP) • Redox reactions
Aut2-2		
Aut2-3		
Aut2-4		
Aut2-5		
Aut2-6	December	<u>Revision, Assessment and Feedback</u>
Aut2-7		
		Christmas holiday
Spr1-1	January	<u>Chemistry: energy changes</u> <ul style="list-style-type: none"> • Exothermic and endothermic reactions • Energy changes • Energy transfers • Bond energies • Chemical batteries (TRIPLE) • Fuel cells (TRIPLE)
Spr1-2		
Spr1-3		
Spr1-4		
Spr1-5		
Spr1-6	February	<u>Revision, Assessment and Feedback</u>
		Half term holiday
Spr2-1	March	<u>Chemistry: Organic</u> <ul style="list-style-type: none"> • Hydrocarbons • Fractional distillation • Cracking • Alcohols (TRIPLE) • Carboxylic acids (TRIPLE) • Esters (TRIPLE) • Condensation polymers (TRIPLE)
Spr2-2		
Spr2-3		
Spr2-4		
Spr2-5		
Spr2-6		
		<u>Revision, Assessment and Feedback</u>
	April	Easter holiday
Sum1-1		<u>Chemistry: Chemical analysis:</u> <ul style="list-style-type: none"> • Purity

Sum1-2		<ul style="list-style-type: none"> • Test for gases • Paper chromatography • Test for anions (TRIPLE) • Test for cations (TRIPLE) • Mass spectroscopy (TRIPLE) <u>Revision, Assessment and Feedback</u> <u>Chemistry: Atmosphere:</u> <ul style="list-style-type: none"> • Evolution of atmosphere • Global warming • Carbon footprint • Lifecycle assessments • Air pollution <u>Revision, Assessment and Feedback</u>
Sum1-3	May	
Sum1-4		
Sum1-5		
Sum1-6		
	June	Half term holiday
Sum2-1	June	<u>Chemistry: Using resources</u> <ul style="list-style-type: none"> • Composites and ceramics (TRIPLE) • Polymers (Triple) • Corrosion (TRIPLE) • Recycling • Potable water • Waste management.
Sum2-2		
Sum2-3		
Sum2-4		
Sum2-5	July	<u>Revision, Assessment and Feedback</u>
Sum2-6		
Sum2-7		