



Chemistry – Year 10 Useful Links

4 Chemical Changes

Topic	YouTube Link
4.1 - Acids & Bases	GCSE Chemistry - Acids and Bases/
4.2 – Titration Practical (Required Practical)(Triple nly)	Neutralisation Titration - GCSE Science Required Practical (Triple)
4.3 – Strong Acids and Weak Acids	GCSE Chemistry - The pH Scale & Strong vs Weak Acids (Higher Tier)
4.4 - Neutralisations reactions	GCSE Chemistry - Neutralisation Reactions
4.5 - The Reactivity Series & Displacement Reactions	GCSE Chemistry - Reactivity Series of Metals & Displacement Reactions
4.6 - Separating Metals from Metal Oxides	GCSE Chemistry - Extraction of Metals & Reduction
4.7 – Redox Reactions	GCSE Chemistry - Oxidation and Reduction - Redox Reactions (Higher Tier)
4.8 - Electrolysis (Part 1)	Electrolysis Part 1/3 - Basics and Molten Compounds
4.9 - Electrolysis (Part 2) – Aluminium Oxide	GCSE Chemistry - Electrolysis P2 - Electrolysis to Extract Metals From Oxides
4.10 - Electrolysis (Part 3) - Aqueous Solutions	GCSE Chemistry - Electrolysis Part 3 - Aqueous Solutions
Chemical Changes Podcasts	Revise chemical changes for your GCSE science exam with BBC Bitesize podcasts - BBC Bitesize
Sample Exam Questions – Chemical Changes	Multiple choice questions - Sample exam questions - chemical changes - AQA - GCSE Chemistry (Single Science) Revision - AQA - BBC Bitesize
Physics and Maths Tutor – Chemical Changes – Detailed Notes, Flashcards, Mind Maps, Exam Questions	AQA GCSE Chemistry Topic 4: Chemical Changes Revision - PMT
Bitesize Quizzes	GCSE chemistry questions - reactions of metals GCSE chemistry revision - BBC Bitesize GCSE chemistry questions - acids, alkalis and salts GCSE chemistry revision - BBC Bitesize GCSE chemistry questions - acids, alkalis and salts 2 GCSE chemistry revision - BBC Bitesize

	GCSE chemistry questions - electrolysis GCSE chemistry revision - BBC Bitesize GCSE chemistry questions - titrations GCSE chemistry revision - BBC Bitesize
Free Science Lessons – Chemical Changes Playlist	GCSE Chemistry Paper 1 Chemical Changes 2024 freesciencelessons
Flashcards- Chemical changes	GCSE Chemistry flashcards - chemical changes - BBC Bitesize
Grade Gorilla -Chemical Changes -End of topic exam style questions	GCSE Chemistry - Acids Grade Gorilla GCSE Chemistry - Electrolysis Grade Gorilla GCSE Chemistry - Metal Reactivity Grade Gorilla

5 Energy Changes

Topic	YouTube Link
5.1 - Exothermic and Endothermic Reactions	GCSE Chemistry - Exothermic and Endothermic Reactions
5.2 – Bond Energies	GCSE Chemistry - Bond Energies (Higher tier)
5.3 – Cells and Batteries (Triple only)	GCSE Chemistry Revision "Cells and Batteries" (Triple)
5.4 – Fuel Cells (Triple only)	GCSE Chemistry - Fuel Cells
Sample Exam Questions – Energy Changes	Multiple choice questions - Sample exam questions - energy changes - AQA - GCSE Chemistry (Single Science) Revision - AQA - BBC Bitesize
Physics and Maths Tutor – Energy changes – Detailed Notes, Flashcards, Mind Maps, Exam Questions	AQA GCSE Chemistry Topic 5: Energy Changes Revision - PMT
Free Science Lessons – Energy changes	GCSE Chemistry Paper 1 Energy Changes 2024 freesciencelessons
Flash cards- Energy changes	GCSE Chemistry flashcards - energy changes - BBC Bitesize
Grade Gorilla -Energy Changes -End of topic exam style questions	GCSE Chemistry - Energy Changes Grade Gorilla

6 The rate and extent of chemical change

Topic	YouTube Link
6.1 - Rates of Reaction	GCSE Chemistry - Rates of Reaction
6.2 - Factors Affecting Rates of Reaction and Collision Theory	GCSE Chemistry - Factors Affecting the Rate of Reaction
6.3 - Measuring Rates of Reaction From a graph	GCSE Chemistry - How to Calculate the Rate of Reaction - Measuring Rate of Reaction
6.4 - Reversible Reactions & Dynamic Equilibrium	GCSE Chemistry - Reversible Reactions and Equilibrium
6.5 - Le Chatelier's Principle (Higher tier only)	GCSE Chemistry - Le Chatelier's Principle (Higher Tier)
Sample Exam Questions – The rate and extent of chemical change	Multiple choice questions - Sample exam questions - the rate and extent of chemical change - AQA - GCSE Chemistry (Single Science) Revision - AQA - BBC Bitesize
Physics and Maths Tutor – The rate and extent of chemical change – Detailed Notes, Flashcards, Mind Maps, Exam Questions	AQA GCSE Chemistry Topic 6: The Rate and Extent of Chemical Change Revision - PMT
Free Science Lessons – The Rate and Extent of Chemical change Playlist	GCSE Chemistry Paper 2 Rates of Reaction 2024 freesciencelessons
Flashcards-The Rate and extent of chemical change	GCSE Chemistry flashcards - the rate and extent of chemical change - BBC Bitesize
Grade Gorilla -The Rate and Extent of Chemical Change -End of topic exam style questions	GCSE Chemistry - Rates Grade Gorilla

8 Chemical Analysis

Topic	YouTube Link
8.1 - Purity & Formulations	GCSE Chemistry - Purity and Formulations
8.2 - Paper Chromatography	GCSE Chemistry - Paper Chromatography
8.3 - Tests for Gases	GCSE Chemistry - How to Test for Gases - Testing for Chlorine / Oxygen / Hydrogen / CO₂

8.4 – Test for Anions (Triple only)	GCSE Chemistry - Tests for Anions - Carbonate, Sulfate and Halide Ions (2026/27 exams)
8.5 – Test for Cations (Triple only)	Identifying Ions - GCSE Science Required Practical
8.6 – Flame Emission Spectroscopy (Triple only)	GCSE Chemistry - Flame Emission Spectroscopy (Flame Photometry) (2026/27 exams)
Sample Exam Questions – Chemical Analysis	Multiple choice questions - Sample exam questions - chemical analysis - AQA - GCSE Chemistry (Single Science) Revision - AQA - BBC Bitesize
Physics and Maths Tutor –Chemical Analysis– Detailed Notes, Flashcards, Mind Maps, Exam Questions	AQA GCSE Chemistry Topic 8: Chemical Analysis Revision - PMT
Bitesize Quizzes	GCSE chemistry questions - pure substances and mixtures GCSE chemistry revision - BBC Bitesize
Free Science Lessons –Chemical Analysis Playlist	GCSE Chemistry Paper 2 Chemical Analysis 2024 freesciencelessons
Flashcards-chemical analysis	GCSE Chemistry flashcards - chemical analysis - BBC Bitesize
Grade Gorilla -Chemical Analysis -End of topic exam style questions	GCSE Chemistry - Ion Identification Grade Gorilla

Year 10 Key Words and definitions

Key Word	Definition
Electrolysis	The use of electricity to break down molten or dissolved ionic compounds.
Oxidation	Loss of electrons or gain of oxygen.
Reduction	Gain of electrons or loss of oxygen.
Exothermic reaction	A reaction that releases energy to the surroundings.
Endothermic reaction	A reaction that absorbs energy from the surroundings.
Rate of reaction	The speed at which a chemical reaction happens, measured as change in quantity per unit time.
Mean rate of reaction	The quantity of reactant used or product formed divided by the time taken.
Collision theory	A theory stating that reactions only occur when particles collide with enough energy.
Activation energy	The minimum energy particles must have to react.
Catalyst	A substance that speeds up a reaction without being used up.
Reversible reaction	A reaction in which products can react to reform the original reactants.
Dynamic equilibrium	When forward and reverse reactions occur at the same rate in a closed system.
Le Chatelier's principle	If conditions change, a system at equilibrium responds to oppose the change.
Chromatography	A technique used to separate mixtures and identify substances.
Rf value	The distance moved by a substance divided by the distance moved by the solvent.

Year 10 commonly misspelt words

Key Word	Definition
Anhydrous	Without water
Aqueous	Dissolved in water
Chlorine	Group 7 element
Chromatography	Technique to separate coloured dyes
Collide	Particles hitting each other
Collision theory	Particles must collide to react
Cryolite	Mineral used to dissolve aluminium oxide
Endothermic	Reaction that absorbs heat energy
Electrode	Conducting rods used in electrolysis
Electrolysis	Breaking down with electricity
Equilibrium	A reversible reaction where the amounts of substances are constant
Exothermic	Reaction that releases heat energy
Fluorine	The most reactive non metal
Fuel	Substance containing stored chemical energy
Gaseous	In the form of a gas
Halide	Salt (or negative ion) containing a halogen
Hydrated	With water
Oxidation	Reaction in which a substance combines with oxygen.
Oxidised	Have oxygen added
Reversible	Reaction where the products can be turned back into the reactants