

Revision Schedule 2025

Year 13 Revision Schedule October 2026 Mock

Subject/Course:	AQA A-level Chemistry
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Topic	Key knowledge/skills/questions	R	A	G	Revised	Resources/activities/links
3.1.1 Atomic structure	- Fundamental particles - Mass number and isotopes - Electron configuration					Educake/Erevision/Physics & Maths Tutor/Free Science lessons videos/Cognito notes for all topics
3.1.2 Amount of substance	- Relative atomic mass and relative molecular mass - The mole and the Avogadro constant - The ideal gas equation - Empirical and molecular formula - Balanced equations and associated calculations					
3.1.3 Bonding	- Ionic bonding - Nature of covalent and dative covalent bonds - Metallic bonding - Bonding and physical properties - Shapes of simple molecules and ions - Bond polarity - Forces between molecules					
3.1.4 Energetics	- Enthalpy change - Calorimetry - Applications of Hess's law - Bond enthalpies					
3.1.5 Kinetics	- Collision theory - Maxwell-Boltzmann distribution - Effect of temperature on reaction rate - Effect of concentration and pressure - Catalysts					
3.1.6 Chemical equilibria	- Chemical equilibria and Le Chatelier's principle - Equilibrium constant K_c for homogeneous systems					

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3.1.7 Oxidation, reduction and redox equations	- oxidation state of an element in a compound or ion from the formula - half-equations identifying the oxidation and reduction - redox equations					
3.2.1 Periodicity	- Classification into s, p, d or f block - Physical properties of Period 3 elements					
3.2.2 Group 2, the alkaline earth metals	- trends in atomic melting point, radius and first ionisation - reactions of the elements Mg–Ba with water - use of magnesium in the extraction of titanium from TiCl_4 - use of BaSO_4 and $\text{Mg}(\text{OH})_2$ in medicine and of $\text{Ca}(\text{OH})_2$ in agriculture - use of acidified BaCl_2 solution to test for sulfate ions					
3.2.3 Group 7(17), the halogens	- Trends in properties - Uses of chlorine and chlorate(I) - test-tube reactions to identify cations and anions					
3.3.1 Introduction to organic chemistry	- Nomenclature and types of formulae - Reaction mechanisms - Isomerism					
3.3.2 Alkanes	- Fractional distillation of crude oil - Modification of alkanes by cracking - Combustion of alkanes - Chlorination of alkanes					
3.3.3 Halogenoalkanes	- Nucleophilic substitution - Elimination - Ozone depletion					
3.3.4 Alkenes	- Structure, bonding and reactivity - Addition reactions of alkenes - Addition polymers					
3.3.5 Alcohols	- Alcohol production - Oxidation of alcohols - Elimination					
3.3.6 Organic analysis	- Identification of functional groups by test-tube reactions - Mass spectrometry - Infrared spectroscopy					