

OCR A Level Chemistry

Exam Board	Unit	Overview	Assessment	Indicative texts	Weight	Support available
OCR A H432 Fully accredited	Paper 1 H432/01	Periodic table, elements and physical chemistry Module 2- Foundation in chemistry Module 3- Periodic table and energy Module 5- Physical chemistry and transition elements	<ul style="list-style-type: none"> Multiple choice Written paper Structured questions and extended response questions covering theory and practical skills 2 hours 15mins 	Atomic structure; Quantitative chemistry: formulae, equations, amount of substance and the mole; Reactions of acids; Oxidation number and redox reactions; Bonding and structure; The periodic table: periodic and group properties; Enthalpy changes and their determination; Rates of reaction; Reversible reactions and chemical equilibrium; Consideration of energy and yield in improving sustainability; Rate equations, orders of reaction, the rate determining step; Equilibrium constants, K_c and K_p ; Acid-base equilibria including pH, K_a and buffer solutions; Lattice enthalpy and Born-Haber cycles; Entropy and free energy; Electrochemical cells; Redox chemistry; Transition elements	37% 100 marks	<ul style="list-style-type: none"> Sample assessment materials available Teaching and learning support, including: suggested activities, lesson resources; teaching guides
	Paper 2 H432/02	Synthesis and analytical techniques Module 4- Core organic chemistry Module 6- Organic chemistry and analysis	<ul style="list-style-type: none"> Multiple choice Written paper Structured questions and extended response questions covering theory and practical skills 2 hours 15mins 	Nomenclature and formula representation, functional groups, organic reactions and isomerism; Aliphatic hydrocarbons; Alcohols and haloalkanes; Organic practical skills and organic synthesis; Instrumental analytical techniques to provide evidence of structural features in molecules; Aromatic compounds; Carboxylic acids and esters; Organic nitrogen compounds: amines and amino acids; Polymerisation: addition polymers and condensation polymers; Synthetic organic chemistry and further development of practical skills; The importance of modern analytical techniques in organic analysis	37% 100 marks	<ul style="list-style-type: none"> Sample assessment materials available Teaching and learning support, including: suggested activities, lesson resources; teaching guides
	Paper 3 H432/03	Unified chemistry Development of practical skills in chemistry Covers content from: Periodic table, elements and physical chemistry Synthesis and analytical techniques	<ul style="list-style-type: none"> 1 hour 30mins Written paper Structured questions and extended response questions covering theory and practical skills 	The Development of practical skills in chemistry (Module 1) will be covered by various practical activities throughout the year. These will be tested throughout the written examinations Structured and synoptic questions covering all the above topics	26% 70 marks	<ul style="list-style-type: none"> Class practical's and PAG's Teaching and learning support, including: suggested activities, lesson resources; teaching guides

Non-exam assessment- Practical Endorsement for Chemistry
Candidates complete minimum of 12 practical activities to demonstrate practical competence