

A Level Chemistry Roadstory

	Term 1			Term 2				Term 3			Term 4			Term 5		Term 6			
Module	Foundations in Chemistry			Foundations in chemistry	The periodic table and energy	Basic concepts of organic chemistry		Alkanes	Alkenes	Alcohols	The periodic table and energy	Haloalkanes	Organic synthesis	The periodic table and energy	The periodic table and energy	Analytical techniques	carboxylic acids and derivatives	PAG 6	aromatic compounds
Chemistry Yr 12	Atomic structure and isotopes, Relative mass, Formulae and equations, Amount of substance and the mole	Determination of formulae, Moles and volumes, Reacting quantities, Electron Configurations	Ionic Bonding and structure, Covalent bonding, Shapes of molecule, Electronegativity and polarity, Hydrogen bonding	Acids, bases, and neutralisation, Acid-base titrations, Redox	The Periodic Table, Ionisation Energies, Periodic Trends in bonding and structure, Trends in group 2, Redox, The Halogens	Nomenclature of organic compounds, Isomerism, Introduction to reaction mechanisms		Properties of the alkanes, Chemical reactions of the alkanes	The properties of the alkenes, Stereoisomerism, Reactions of the alkenes, Electrophilic addition in alkenes, Polymerisation in alkenes	Properties of alcohols, Reactions of alcohols	Qualitative analysis including practical endorsement, Enthalpy and Hess Law including practical endorsement	The chemistry of the haloalkanes, Organohalogen compounds in the environment	Practical techniques in organic chemistry, Synthetic routes, PAG 7	Bond Enthalpies, Reaction rates, Catalysts, The Boltzmann Distribution, Dynamic equilibrium and Le Chatelier's principle	The Equilibrium constant Kc	Mass spectrometry, Infrared spectrometry	Introducing benzene, Electrophilic reactions of benzene The chemistry of phenol, Directing groups	synthesis of aspirin	Introducing benzene, Electrophilic reactions of benzene The chemistry of phenol, Directing groups
Module	Aromatic compounds recap	Carbonyl compounds and carboxylic acids amines amino acids and polymers (recap)	Rates of reaction	Equilibrium	Acids, bases and pH	buffers and neutralisation	Enthalpy and entropy	Redox and electrode potentials	Chromatography and spectroscopy	Organic synthesis	Transition elements	preparation for exams	Preparation for exams						
Chemistry Yr 13	Introducing benzene, Electrophilic reactions of benzene The chemistry of phenol, Directing groups	Carbonyl compounds, Identifying aldehydes and ketones, Carboxylic acids, Carboxylic acid derivatives Amines, Amino acids, amides, and chirality, Condensation polymers	Orders, rate equations, and rate constants, Concentration-time graphs, Rate-concentration graphs and initial rates, Rate-determining step, Rate constants and temperature	The equilibrium constant Kc, The equilibrium constant Kp, Controlling the position of equilibrium	Bronsted-Lowry acids and bases, The pH scale and strong acids, The acid dissociation constant K _a , The pH of weak acids, pH and strong bases	Buffer solutions, Buffer solutions in the body, Neutralisation	Lattice enthalpy, Enthalpy changes in solution, Factors affecting lattice enthalpy and hydration, Entropy, Free energy	Redox reactions, Manganate (VII) redox titrations, Iodine/thiosulfate redox titrations, Electrode potentials, Predictions from electrode potentials, Storage and fuel cells	Chromatography and functional groups, NMR spectroscopy, C-13 NMR spectroscopy, Proton spectroscopy, Interpreting NMR spectra, Combined techniques	Practical techniques in organic chemistry, Synthetic routes, PAG 7	complex ions, ligand substitution and precipitation, redox and qualitative analysis,	revision of AS and A2	Revision of AS and A2 content						