Key Terms Module 1&2

Atomic structure	Mole calculations
Relative mass	Moles of gas
Formulae and equations	Atom economy
The mole	Concentration calculations
empirical formulae	Ideal gas equation
Mole calculations	Neutralisation
Percentage yields	Alkalis
Acids	Bases
Acid–base titrations	Electronic configuration
Oxidation number	Sub shells
Redox reactions	bond polarity
Energy levels	Isotopes
Ionic bonding	Balancing equations
Covalent bonding	Anhydrous
The shapes of simple molecules and ions	Water of crystallisation
Electronegativity	Hydrogen bonding
Intermolecular forces	Lattice

Key Terms Module 3

The periodic table	Atomic number
Period 2	Period 3
Metallic bonding	Ionisation energy
Melting point	Giant covalent lattice
Reactivity of group 2	Group 2 reactions
Uses of group 2 compounds	Le Chatelier
Disproportionation	Water treatment
K_c	Test for halide ions
How to test for a carbonate ion	How to test for a sulphate ion
Exothermic	Endothermic
Enthalpy profile diagrams	Activation energy
Standard conditions	Enthalpy change of reaction
Enthalpy change of combustion	Enthalpy change of formation
Enthalpy change of neutralisation	$q=mc\Delta T$
Average bond enthalpy	Hess's Law
Catalysts	Collision theory
Boltzmann distribution	Equilibrium

Key Terms Module 4

Hydrocarbon	IUPAC rules
Alkane	Alkene
Homologous series	Skeletal formula
Functional groups	Aliphatic
Aromatic	Saturated
Isomerism	Homolytic fission
Reaction mechanisms	Heterolytic fission
Radical substitution	Tetrahedral shape
Trigonal planar	Stereoisomerism
E/Z isomerism	CIP rules
Addition reactions	Electrophile
Addition polymerisation	Markownikoffs rule
Reactions of alcohols	Substitution reactions of haloalkanes
Reflux	Halogen radicals
Separating	Drying
Recrystallisation	Distilling
IR	Mass spec

Key Terms Module 5

Rate equation	First order	Oxidation
Zero order	Second order	Reduction
Calculating *k*	Concentration-time graphs	Redox
Rate-concentration graphs	Rate determining step	Complex ion
Effect of temp on rate	Arrhenius equation	Ligand substitution
Mole fraction	Partial pressure	Test for carbonates
K_p	Homogenous	Test for ammonium ions
Equilibrium constant	heterogeneous	Flame tests
Bronsted Lowry Acid	Acid dissociation constant	Precipitation reactions
pH	Relationship between K_a and pK_a	Test for halides
K_w	Buffers	Test for sulphates
pH titration curve	Calculating pH of a buffer solution	Optical isomerism
Indicator	Lattice enthalpy	
Entropy	Born-Haber	
Redox	Free Energy	
Redox titrations	Electrode potentials	
Storage and fuel cells	Standard cell	
Transition metals	Ligands	

Key Terms Module 6

Benzene	Electrophilic substitution	NMR
Phenol	Aromatic compounds	Test for haloalkanes
Directing effects	Carbonyl compounds	Test for carbonyls
Aldehyde reactions	Nucleophilic addition	Mass spectra
Test for carbonyl	HCN	Test for alkanes
Tollens reagent	Esters	Test for phenols
Carboxylic acids	Esterification	Test for aldehydes
Acyl chlorides	Hydrolysis of esters	IR spectra
Amines	Polymerisation	
Aliphatic amines	Aromatic amines	
Amino acid reactions	Amines and acid	
Secondary amines	Primary amines	
Condensation polymers	Addition polymerisation	
reflux	Distillation	
Recrystallization	filtration	
Melting point	Chromatography	