



LabSkills activity	OCR AS/A2 specification
<b>Techniques</b>	
Reflux	AS Unit F322: Chains, energy and resources A2 Unit F324: Rings, polymers and analysis
Recrystallisation	AS Unit F322: Chains, energy and resources A2 Unit F324: Rings, polymers and analysis
Filtration	AS Unit F322: Chains, energy and resources A2 Unit F324: Rings, polymers and analysis
Distillation	AS Unit F322: Chains, energy and resources A2 Unit F324: Rings, polymers and analysis
Solvent extraction	AS Unit F322: Chains, energy and resources A2 Unit F324: Rings, polymers and analysis
Melting point	1.2.2 Bonding and structure 1.3.1 Periodicity 4.1.2 Carbonyl compounds
Thin layer chromatography	4.3.1 Chromatography
Titration	1.1.3 Acids 1.1.4 Redox
Titration curves	5.1.3 Acids, bases and buffers
Collection of a gas	1.1.2 Moles and equations
Enthalpy change of neutralisation	2.3.1 Enthalpy changes 5.2.2 Enthalpy and entropy
Enthalpy change of combustion	2.3.1 Enthalpy changes
Colorimetry	5.1.1 How fast?
Electrochemical cells	5.2.3 Electrode potentials and fuel cells
Tests for inorganic compounds	1.3.2 Group 2 1.3.3 Group 7
Tests for organic compounds	2.1.2 Alkanes 2.1.3 Alkenes 2.2.1 Alcohols 2.2.2 Halogenoalkanes 4.1.2 Carbonyl compounds
Transition metals	5.2.3 Electrode potentials and fuel cells 5.3.1 Transition elements
Mass spectrometry	2.2.3 Modern analytical techniques
IR spectroscopy	2.2.3 Modern analytical techniques 2.4.1 Chemistry of the air 4.3.2 Spectroscopy
NMR spectroscopy	4.3.2 Spectroscopy
GC analysis	4.3.1 Chromatography
HPLC analysis	4.3.1 Chromatography
Stoichiometry and yield	1.1.2 Moles and equations 2.1.1 Basic concepts
Quantities and concentration	1.1.2 Moles and equations 2.1.1 Basic concepts
Errors and significant figures	All units
Reaction rates	2.3.2 Rates and equilibrium 5.1.1 How fast?

Equilibrium constants	5.1.2 How far?
Weights and measures	All units
Preparing solutions	AS Unit F321: Atoms, Bonds and Groups
Heating	All units

## Experiments

Oxidation of alcohols	2.2.1 Alcohols
Enthalpy change of neutralisation	2.3.1 Enthalpy changes
Enthalpy change of combustion	2.3.1 Enthalpy changes
Preparation of an alkene	2.2.1 Alcohols
	2.2.2 Halogenoalkanes
Preparation of an organic acid	2.2.1 Alcohols
	4.1.2 Carbonyl compounds
Preparation of a halogenoalkane	2.1.2 Alkanes
Acid/base titration	1.1.3 Acids
RMM of volatile liquid	1.1.1 Relative masses
Iodine/thiosulfate titration	1.1.4 Redox
	1.3.3 Group 7
Identification of an unknown	1.3.2 Group 2
	1.3.3 Group 7
	2.1.2 Alkanes
	2.1.3 Alkenes
	2.2.1 Alcohols
	2.2.2 Halogenoalkanes
	4.1.2 Carbonyl compounds
Enthalpy of hydration (Hess' law)	2.3.1 Enthalpy changes
	5.2.1 Lattice enthalpy
Multi-stage synthesis - aspirin	A2 Unit F324: Rings, polymers and analysis
	4.2.3 Synthesis
Preparation of an ester	2.2.1 Alcohols
	4.1.3 Carboxylic acids and esters
Hydrolysis of an ester	4.1.3 Carboxylic acids and esters
Nitration of an aromatic	4.1.1. Arenes
Preparation of chrome alum	5.3.1 Transition elements
Iron(II)/permanganate titration	1.1.4 Redox
	5.3.1 Transition elements
Reaction of iodine and propanone	5.1.1 How fast?
Iodine clock	5.1.1 How fast?
Investigating reaction equilibria	5.1.2 How far?

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