LabSkills activity	Edexcel AS/A2 specification
Techniques	
Reflux	2.10 Organic chemistry
	5.4 Organic chemistry - arenes, nitrogen compounds and synthesis
Recrystallisation	2.10 Organic chemistry
	5.4 Organic chemistry - arenes, nitrogen compounds and synthesis
Filtration	Unit 3
	Unit 6
	5.4 Organic chemistry - arenes, nitrogen compounds and synthesis
Distillation	1.7 Introductory organic chemistry
	2.10 Organic chemistry
	5.4 Organic chemistry - arenes, nitrogen compounds and synthesis
Solvent extraction	2.10 Organic chemistry
	5.4 Organic chemistry - arenes, nitrogen compounds and synthesis
Melting point	1.5 Atomic structure and the periodic table
	1.6 Bonding
	2.5 Intermolecular forces
	5.4 Organic chemistry - arenes, nitrogen compounds and synthesis
Thin layer chromatography	
Titration	2.7 The periodic table - groups 2 and 7
	3.4 Task for activity c
	6.4 Tasks for activity c
Titration curves	4.7 Acid/base equilibria
	6.4 Tasks for activity c
Collection of a gas	4.3 How fast?
	4.4 How far? - entropy
Enthalpy change of neutralisation	1.4 Energetics
	3.4 Tasks for activity c
Enthalpy change of combustion	1.4 Energetics
Colorimetry	4.3 How fast?
Electrochemical cells	5.3 Redox and the chemistry of transition metals
Tests for inorganic compounds	2.7 The periodic table - groups 2 and 7
	2.11 Mechanisms
	3.3 Tasks for activity b
Tests for organic compounds	1.7 Introductory organic chemistry
	2.10 Organic chemistry
	3.3 Tasks for activity b
	4.8 Further organic chemistry
	5.4 Organic chemistry - arenes, nitrogen compounds and synthesis
	6.3 Tasks for activity b
Transition metals	5.3 Redox and the chemistry of transition metals
	6.3 Tasks for activity b
Mass spectrometry	1.5 Atomic structure and the periodic table
	2.12 Mass spectra and IR
	4.9 Spectroscopy and chromatography
	5.4 Organic chemistry - arenes, nitrogen compounds and synthesis
IR spectroscopy	2.12 Mass spectra and IR
	4.9 Spectroscopy and chromatography
	5.4 Organic chemistry - arenes, nitrogen compounds and synthesis

NMR spectroscopy	4.9 Spectroscopy and chromatography
	5.4 Organic chemistry - arenes, nitrogen compounds and synthesis
GC analysis	4.9 Spectroscopy and chromatography
HPLC analysis	4.9 Spectroscopy and chromatography
Stoichiometry and yield	1.3 Formulae, equations and amounts of substance
	5.3 Redox and the chemistry of transition metals
Quantities and concentration	1.3 Formulae, equations and amounts of substance
	3.4 Tasks for activity c
Errors and significant figures	All units
	2.7 The periodic table - groups 2 and 7
	Unit 3
Reaction rates	2.8 Kinetics
	4.3 How fast?
	4.6 Application of rates and equilibrium
	6.4 Tasks for activity c
Equilibrium constants	4.5 Equilibria
	4.6 Application of rates and equilibrium
Weights and measures	All units
Preparing solutions	1.5 Atomic structure and the periodic table
Heating	All units

Experiments	
Oxidation of alcohols	1.7 Introductory organic chemistry
	2.10 Organic chemistry
	3.5 Tasks for activity d
	4.8 Further organic chemistry
Enthalpy change of neutralisation	1.4 Energetics
	3.4 Tasks for activity c
Enthalpy change of combustion	1.4 Energetics
Preparation of an alkene	3.5 Tasks for activity d
Preparation of an organic acid	2.10 Organic chemistry
	3.5 Tasks for activity d
	4.8 Further organic chemistry
Preparation of a halogenoalkane	1.7 Introductory organic chemistry
	3.5 Tasks for activity d
Acid/base titration	2.7 The periodic table - groups 2 and 7
	3.4 Tasks for activity c
	6.4 Tasks for activity c
RMM of volatile liquid	
Iodine/thiosulfate titration	2.7 The periodic table - groups 2 and 7
	5.3 Redox and the chemistry of the transition metals
Identification of an unknown	1.7 Introductory organic chemistry
	2.7 The periodic table - groups 2 and 7
	2.10 Organic chemistry
	2.11 Mechanisms
	4.8 Further organic chemistry
	5.3 Redox and the chemistry of the transition metals
	5.4 Organic chemistry - arenes, nitrogen compounds and synthesis
Enthalpy of hydration (Hess' law)	1.4 Energetics
	3.4 Tasks for activity c
Multi-stage synthesis - aspirin	6.5 Tasks for activity d
	6.6 Task for the multi-stage experiment (c+d)

Preparation of an ester	4.8 Further organic chemistry
	6.5 Tasks for activity d
Hydrolysis of an ester	4.8 Further organic chemistry
Nitration of an aromatic	5.4 Organic chemistry - arenes, nitrogen compounds and synthesis
Preparation of chrome alum	5.3 Redox and the chemistry of the transition metals
	6.3 Tasks for activity b
	6.5 Tasks for activity d
Iron(II)/permanganate titration	5.3 Redox and the chemistry of the transition metals
	6.4 Tasks for activity c
Reaction of iodine and propanone	2.8 Kinetics
	4.3 How fast?
	4.6 Application of rates and equilibrium
	6.4 Tasks for activity c
Iodine clock	2.8 Kinetics
	4.3 How fast?
	4.6 Application of rates and equilibrium
	6.4 Tasks for activity c
Investigating reaction equilibria	4.5 Equilibria
	4.6 Application of rates and equilibrium

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