



STEP UP TO 6TH FORM

KIMBERLEY SCHOOL TRANSITION INFORMATION

Chemistry

A Level OCR

COURSE DETAILS

UNIT 1

Development of Practical Skills

This module covers the practical skills that students will develop throughout the course. The practical skills in this module can be assessed within written examinations. Students will demonstrate their practical competence in 12 practical assessments.

UNIT 2

Foundations in Chemistry

- Atoms, compounds, molecules and equations
- Amount of substance (mole calculations)
- Acid-base and redox reactions
- Electrons, bonding and structure.

UNIT 3

Periodic Table & Energy

- The periodic table and periodicity
- Group 2 and the halogens
- Qualitative analysis
- Enthalpy changes
- Reaction rates and equilibrium (qualitative)



Core Organic Chemistry & Analysis

- Basic concepts
- Hydrocarbons
- Alcohols and haloalkanes
- Organic synthesis
- Analytical techniques (infra-red spectroscopy and mass spectrometry).

UNIT 4

Physical Chemistry and Transition Elements

- Reaction rates and equilibrium (quantitative)
- pH and buffers
- Enthalpy, entropy and free energy
- Redox and electrode potentials
- Transition elements.

UNIT 5

Organic Chemistry and Analysis

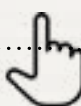
- Aromatic compounds
- Carbonyl compounds
- Carboxylic acids and ester
- Nitrogen compounds
- Polymers
- Organic synthesis
- Chromatography and spectroscopy (NMR)

EXAMS

2 x 2hr15min (37%)
1 x 1hr30min (26%)

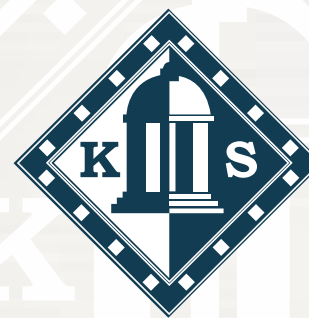


LINK TO THE SPECIFICATION



See a detailed document of what we will cover in this course:

www.ocr.org.uk/Images/171720-specification-accredited-a-level-gce-chemistry-a-h432.pdf



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Work you can do to prepare for A Level study

Wider Reading

We recommend you read through this transition book and try all the activities before starting *A level Chemistry CGP Head Start to Chemistry*.

YOUTUBE



Veritasium	The Royal Institution
ASAPscience	Reel Truth Science
SixtySymbols	Steve Mould
TedEd	Smarter Everyday

BOOKS



The Disappearing Spoon – Sam Kean
 Bad Science – Ben Goldacre
 Periodic Tales – Hugh Aldersley-Williams

FILM & TV



Chemistry - A Volatile History BBC
Tv, Professor Jim Al-Kalili

PODCASTS



Ologies with Alie Ward
 Science Vs
 The Curious Cases of Rutherford and Fry
 New Scientist Weekly
 The Life Scientific
 This Podcast Will Kill You
 The Infinite Monkey Cage

USEFUL RESOURCE LINKS

MAChemGuy https://docs.google.com/document/d/1MFgkCts2xGS0x5f07v0K_ejKMpli04nNNsCq3jDDVwE/edit
 Primrose Kitten A level Chemistry <https://primrosekitten.org/a-level-chemistry/>
 Chemguide <https://www.chemguide.co.uk/>
 Crash Course Chemistry www.youtube.com/playlist?list=PL8dPuualjXtPHzzYuWy6fYEaX9mQQ8oGr

