



**GCE**  
**CHEMISTRY**  
**2410QS / 1410QS**  
**Summer 2023 examinations**

AS	Unit 1	The Language of Chemistry, Structure of Matter and Simple Reactions	Tuesday, 16 May 2023
AS	Unit 2	Energy, Rate and Chemistry of Carbon Compounds	Thursday, 25 May 2023
A2	Unit 3	Physical and Inorganic Chemistry	Monday, 12 June 2023
A2	Unit 4	Organic Chemistry and Analysis	Monday, 19 June 2023
A2	Unit 5	Practical Examination: Experimental Task  Practical Methods and Analysis Task	Wednesday, 10 May 2023 Thursday, 11 May 2023 Friday, 12 May 2023

# Advance Information

## General information for students and teachers

This advance information provides the focus of the content of the Summer 2023 examination papers.

It does not apply to any other examination series.

It is intended to support revision.

It may be used at any time from the date of release.

It must not be taken into the examination.

Released: 06 February 2023

# Subject information for students and teachers

It is important that this advance information is read with reference to the detailed subject content in the specification, which is available [here](#).

This advance information covers Units 1-5.

The format and structure of the examination papers remains unchanged.

The following areas of content are suggested as key areas of focus for revision and final preparation, in relation to the Summer 2023 examinations. Please note, while advance information is intended to help guide and prioritise revision, to support exam performance and progression, revision plans should still take account of everything that has been taught.

For units 1-4 the list shows the main topic areas assessed in **rank order**, with those carrying the **highest mark allocations at the top of each list, so rank number 1 has the highest mark allocation**.

The approach to synoptic assessment is as usual. Topics specified in units 1 and 2 and further developed in the A2 units will be assessed in A2 papers, however the advance information for units 3 and 4 includes only the topics specified in these units. Calculations specified in Unit 1 may also be assessed in Unit 2 and all A2 units.

Advance information for Unit 5 is **not in rank order**.

The aim should still be to cover all specification content in teaching and learning.

Assessment of mathematical skills (Appendix C of the specification) will occur throughout all papers.

## AS Unit 1 – The Language of Chemistry, Structure of Matter and Simple Reactions (2410U10-1)

Rank	Topic areas		Including practical work
1	1.3	Chemical calculations	✓
=2	1.4	Bonding	
	1.7	Simple equilibria and acid-base reactions	✓
=4	1.2	Basic ideas about atoms	
	1.6	The Periodic Table	✓
6	1.5	Solid structures	
7	1.1	Formulae and equations	

**AS Unit 2 – Energy, Rate and Chemistry of Carbon Compounds (2410U20-1)**

Rank	Topic areas		Including practical work
1	2.7	Alcohols and carboxylic acids	✓
2	2.6	Halogenoalkanes	✓
3	2.1	Thermochemistry	✓
=4	2.4	Organic compounds	
	2.8	Instrumental analysis	
6	2.2	Rates of reaction	✓
7	2.5	Hydrocarbons	
8	2.3	The wider impact of chemistry	

**A2 Unit 3 – Physical and Inorganic Chemistry (1410U30-1)**

Rank	Topic areas		Including practical work
1	3.9	Acid-base equilibria	
2	3.3	Chemistry of the <i>p</i> -block	
3	3.4	Chemistry of the <i>d</i> -block transition metals	✓
=4	3.5	Chemical kinetics	✓
	3.2	Redox reactions	✓
	3.8	Equilibrium constants	
7	3.7	Entropy and feasibility of reactions	
=8	3.1	Redox and standard electrode potential	
	3.6	Enthalpy changes for solids and solutions	

**A2 Unit 4 – Organic Chemistry and Analysis (1410U40-1)**

Rank	Topic areas		Including practical work
1	4.8	Organic synthesis and analysis	
=2	4.2	Aromaticity	
	4.5	Carboxylic acids and their derivatives	
4	4.6	Amines	
=5	4.3	Alcohols and phenols	✓
	4.4	Aldehydes and ketones	✓
=7	4.1	Stereoisomerism	
	4.7	Amino acids, peptides and proteins	

## **A2 Unit 5 – Practical Examination (1410U50-1)**

Knowledge, understanding and skills in the following topic areas will be assessed in the **Experimental Task**:

- quantitative analysis – acid-base titration
- qualitative inorganic analysis

Knowledge, understanding and skills in the following topic areas will be assessed in the **Practical Methods and Analysis Task**:

- organic functional groups
- inorganic reactions
- organic reactions
- rates of reaction
- equilibrium constants

End of advance information