

Instructions

• Please ensure that you have read this notice before the examination.

Information

- This notice covers all examined components.
- The format/structure of the assessments remains unchanged.
- This advance information notice details the focus of the content of the exams in the May–June 2022 assessments.
- There are no restrictions on who can use this notice.
- This notice is meant to help students to focus their revision time.
- Students and teachers can discuss the advance information.
- This document has 7 pages.



General advice

- In addition to covering the content outline in the Advance Information, students and teachers should consider how to:
 - manage their revision of content which may be assessed in areas not covered by the Advance Information
 - manage their revision of other parts of the specification which may provide knowledge that helps with understanding the areas being tested in 2022.
- For specifications with synoptic questions, topics not explicitly given in the Advance Information may appear, e.g. where students are asked to bring together knowledge, skills and understanding from across the specification.
- For specifications with optional papers/topics/content, students should only refer to the advance information for their intended option.
- For specifications with NEA, advance information does not cover any NEA components.

A link to the Joint Council for Qualifications guidance document on advance information can be found on the Joint Council for Qualifications website or here.

W50844A 2

Advance Information

Subject specific section

- For each paper the list shows the major focus of the content of the exam.
- Topics **not** assessed either directly or synoptically have also been listed.
- The information is presented in specification order and not in question order.
- Numbers in brackets refer to the points as listed in the specification.
- Assessment of practical skills, maths skills, and Working Scientifically skills will occur throughout all the papers.
- Core practicals that will be assessed have also been listed.
- Topics not explicitly given in either list may appear in low tariff questions or via synoptic or 'linked' questions. Synoptic or 'linked' questions are those that bring together knowledge, skills and understanding from across the specification.
- Students will still be expected to apply their knowledge to unfamiliar contexts.
- Each exam paper may include some, or all, of the content in the listed topic.

W50844A 3

Paper 1CH0/1F

Content will be assessed from the following topics:

- Topic 1 Key concepts in chemistry Types of substance (1.32–1.42)
- Topic 1 Key concepts in chemistry Calculations involving masses (1.43–1.49)
- Topic 2 States of matter and mixtures States of matter (2.1–2.4)
- Topic 2 States of matter and mixtures Methods of separating and purifying substances (2.5–2.12)
- Topic 3 Chemical changes Acids and bases (3.1–3.14)
- Topic 5 Separate chemistry 1 Transition metals, alloys and corrosion (5.1C–5.7C)
- Topic 5 Separate chemistry 1 Quantitative analysis (5.9C–5.14C)
- Topic 5 Separate chemistry 1 Dynamic Equilibria (5.19C–5.24C)

Core practical activities that **will be assessed**:

• Core Practical 3.6 Investigate the change in pH on adding powdered calcium

hydroxide or calcium oxide to a fixed volume of dilute

hydrochloric acid

• Core Practical 5.9C Carry out an accurate acid-alkali titration, using burette,

pipette and a suitable indicator

Topics **not assessed** in this paper:

- Topic 4 Extracting metals and equilibria Obtaining and using metals (4.1–4.12)
- Topic 4 Extracting metals and equilibria Reversible reactions and equilibria (4.13–4.16)
- Topic 5 Separate chemistry 1 Chemical cells and fuel cells (5.25C–5.27C)

W50844A



Paper 1CH0/1H

Content will be assessed from the following topics:

- Topic 1 Key concepts in chemistry Types of substance (1.32–1.42)
- Topic 1 Key concepts in chemistry Calculations involving masses (1.43–1.53)
- Topic 3 Chemical changes Acids and bases (3.1–3.14)
- Topic 3 Chemical changes Electrolytic processes (3.22–3.31)
- Topic 4 Extracting metals and equilibria Obtaining and using metals (4.1–4.12)
- Topic 5 Separate chemistry 1 Quantitative analysis (5.8C–5.18C)
- Topic 5 Separate chemistry 1 Dynamic equilibrium (5.19C–5.24C)

Core practical activities that will be assessed:

- Core Practical 3.6 Investigate the change in pH on adding powdered calcium
 - hydroxide or calcium oxide to a fixed volume of dilute
 - hydrochloric acid
- Core Practical 3.31 Investigate the electrolysis of copper sulfate solution with
 - inert electrodes and copper electrodes
- Core Practical 5.9C Carry out an accurate acid-alkali titration, using burette,
 - pipette and a suitable indicator

Topics **not assessed** in this paper:

- Topic 1 Key concepts in chemistry Atomic structure (1.1–1.12)
- Topic 1 Key concepts in chemistry The periodic table (1.13–1.20)
- Topic 2 States of matter and mixtures States of matter (2.1–2.4)
- Topic 2 States of matter and mixtures Methods of separating and purifying substances (2.5–2.12)
- Topic 4 Extracting metals and equilibria Reversible reactions and equilibria (4.13–4.17)

W50844A 5



Paper 1CH0/2F

Content will be assessed from the following topics:

- Topic 6 Groups in the periodic table Group 1 (6.1–6.5)
- Topic 6 Groups in the periodic table Group 7 (6.6–6.13)
- Topic 7 Rates of reaction and energy changes Rates of reaction (7.1–7.8)
- Topic 7 Rates of reaction and energy changes Heat energy changes in chemical reactions (7.9–7.16)
- Topic 8 Fuels and Earth science Fuels (8.1–8.17)
- Topic 8 Earth and atmospheric science (8.18–8.26)
- Topic 9 Separate chemistry 2 Qualitative analysis: tests for ions (9.1C–9.9C)
- Topic 9 Separate chemistry 2 Hydrocarbons (9.10C–9.16C)
- Topic 9 Separate chemistry 2 Polymers (9.17C–9.25C)
- Topic 9 Separate chemistry 2 Bulk and surface properties of matter including nanoparticles (9.35C–9.39C)

Core practical activities that will be assessed:

- Core Practical 7.1 Investigate the effects of changing the conditions of a
 - reaction on the rates of chemical reaction
- Core Practical 9.6C Identify the ions in unknown salts

Topics **not assessed** in this paper:

- Topic 1 Key concepts in chemistry Atomic structure (1.1–1.12)
- Topic 1 Key concepts in chemistry Covalent bonding (1.28–1.31)
- Topic 1 Key concepts in chemistry Types of substance (1.32–1.42)
- Topic 9 Separate chemistry 2 Alcohols and carboxylic acids (9.26C–9.34C)

W50844A 6



Paper 1CH0/2H

Content will be assessed from the following topics:

- Topic 1 Key concepts in chemistry Calculations involving masses (1.43–1.53)
- Topic 6 Groups in the periodic table Group 7 (6.6–6.13)
- Topic 7 Rates of reaction and energy changes Rates of reaction (7.1–7.8)
- Topic 7 Rates of reaction and energy changes Heat energy changes in chemical reactions (7.9–7.16)
- Topic 8 Fuels and Earth science Fuels (8.1–8.17)
- Topic 8 Fuels and Earth science Earth and atmospheric science (8.18–8.26)
- Topic 9 Separate chemistry 2 Qualitative analysis: tests for ions (9.1C–9.9C)
- Topic 9 Separate chemistry 2 Bulk and surface properties of matter including nanoparticles (9.35C–9.39C)

Core practical activities that will be assessed:

Core Practical 7.1 Investigate the effects of changing the conditions of a

reaction on the rates of chemical reaction

• Core Practical 9.28C Investigate the temperature rise produced in a known

mass of water by the combustion of the alcohols ethanol,

propanol, butanol and pentanol

Topics **not assessed** in this paper:

- Topic 1 Key concepts in chemistry Atomic structure (1.1–1.12)
- Topic 1 Key concepts in chemistry Ionic bonding (1.21–1.27)
- Topic 1 Key concepts in chemistry Covalent bonding (1.28–1.31)

END OF ADVANCE INFORMATION

W50844A 7