

OxfordAQA

International GCSE

CORE Chemistry (9222)

Specimen paper information

For teaching from September 2025 onwards
For International GCSE exams in June 2026 onwards

INTRODUCTION

This document details the subject content assessed in the specimen paper for the International GCSE CORE Chemistry specification 9222.

The purpose of this information is to support teaching and revision. It is provided in the context of the specimen papers being released for schools to use as a mock examination in May 2025.

MOCK EXAM PREPARATION

OxfordAQA is providing information on the focus of the content of the upcoming specimen papers for the GCSE CORE subjects. The purpose of this information is to support teaching and revision in preparing students ahead of sitting the specimen papers as internal mock examinations.

The materials may be shared with students and referred to at any point from the date of release. However, we do not advise that students bring these materials into their mock examinations.

WHAT ARE THE KEY PRINCIPLES TO THIS INFORMATION?

- We have avoided providing too much detail, so that students don't attempt to pre-prepare responses.
- We have made sure this information does not:
 - directly provide answers to any questions
 - compromise the capability of mock examinations to sufficiently differentiate between student performance.

HOW AND WHEN SHOULD THIS INFORMATION BE USED?

- It can be used as soon as the information is released.
- It can be used flexibly by centres to support student revision and exam preparation. You may choose to allow students to access this information before their mock examination to focus their revision and mock examination preparation.
- We advise against bringing this information into the mock examination.

INFORMATION

- The information is presented in specification order and not in question order.
- The format/structure of the paper is as follows: 100 marks, 1 hour 45 minutes, structured and open questions assessing the four assessment objectives and selected elements of the maths skills and practical skills as listed in the specification.

ADVICE

- The following areas of content are suggested as key areas of focus for revision and final preparation, in relation to GCSE CORE specimen paper.
- Topics not assessed directly in questions have been listed.
- Assessment of practical skills and maths skills will occur throughout the specimen paper.
- Students will be expected to apply their knowledge to unfamiliar contexts.

PAPER 1 – 100 marks, 1 hour 45 minutes

The table shows the major focus of the content of the specimen paper.

For schools currently teaching Cambridge iGCSE Chemistry (0620 or 0971) Core Tier, any major subject content differences assessed within the paper have been highlighted in the third column:

Topic heading	Content assessed	Does the content assessed appear in Cambridge iGCSE Chemistry Core tier?	Marks*
A simple model of the atom	3.1.2c, i	Yes	3
The periodic table	3.1.3a, b, c	Yes	6
Chemical bonds: ionic, covalent and metallic	3.2.1c	Yes	4
How bonding and structure are related to the properties of substances	3.2.2a	Yes	5
Structure and bonding of carbon	3.2.3 b, c, d, e	3.2.3 e is not in the Cambridge specification	11
Electrolysis	3.3.2 a, b, c RPA 1, g, j	3.3.2 c, j has some supplement content and some content not in the Cambridge specification	17
Identification of common gases	3.4.2 b	Yes	2
The properties of acids and bases	3.5.1c, f	Yes	2
Conservation of mass including the quantitative interpretation of chemical equations	3.6.1a	Yes	4
Use of amount in relation to masses of pure substances	3.6.2a, b	Supplement content in the Cambridge specification	4
The mole concept	3.6.3a	Supplement content in the Cambridge specification	3
Group properties	3.7.1a, b, f	3.7.1 a has some content not in the Cambridge specification	14

Topic heading	Content assessed	Does the content assessed appear in Cambridge iGCSE Chemistry Core tier?	Marks*
Rate of reaction	3.8.1 a RPA4, b, f	3.8.1 b is not in the Cambridge specification	15
Exothermic and endothermic reactions	3.9.1 a	Not in the Cambridge specification	4
Calculating and explaining energy change	3.9.2 d, e, f, g	Not in the Cambridge specification	11
Crude Oil	3.10.1.1 a,c	Yes	2
Hydrocarbons	3.10.1.2 c	Yes	1
Obtaining useful substances from crude oil	3.10.1.3a, b, c	3.10.1.3 a, b is not in the Cambridge specification	3

* The specimen paper is 100 marks total, however some questions are designed to cover multiple topics so this table includes more than 100 marks.

REQUIRED PRACTICAL THAT WILL BE ASSESSED

- Required practical 1: Investigate the products at the anode and cathode in the electrolysis of copper sulfate solution
- Required practical 4: Investigate factors affecting the rate of reaction

TOPICS NOT DIRECTLY ASSESSED IN THE SPECIMEN PAPER FROM THIS SPECIFICATION

3.1.1 Solids, liquids and gases

3.3.1.1 The reactivity series

3.4.1 Purity and chromatography

3.5.2 Preparation of salts

3.8.4 Redox reactions