

## Sixth Form Entrance Examinations: Chemistry

## Summary

The Chemistry examination is 45 minutes long and composed of three parts; sections A, B and C.

Section A contains multiple choice questions. You are asked to circle the correct answer within the question booklet.

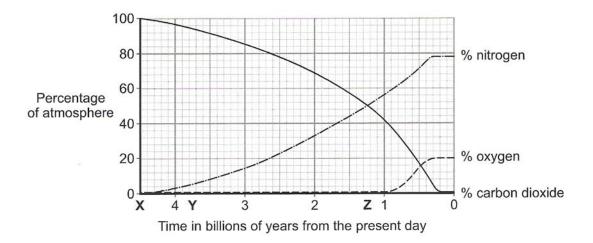
Sections B and C are longer response questions and one question is chosen from each section. The questions in section B focus on chemical principles whilst those in Section C are on practical skills. Marks are awarded for correct use of technical terms and clarity of expression.

It is impossible to know which examination board you will be sitting for GCSE and which material in the specification you will have covered at the point you sit the examination. With this in mind, for section A, we endeavour to select multiple choice questions which provide clues to the desired answer. Similarly, we provide a selection of questions from different topics in sections B and C.

## A sample question from section A:

This question is about changes that have occurred over time in the Earth's atmosphere.

The Earth's early atmosphere was mainly carbon dioxide with small amounts of methane and ammonia.



The graph shows how the percentages of carbon dioxide, nitrogen and oxygen might have changed over time.

About how many years after the Earth was formed (X) did the percentage of carbon dioxide in the atmosphere fall to 60 %?

- 1 1.3 billion years
- 2 1.6 billion years
- 3 2.4 billion years
- 4 2.9 billion years



## A sample question from section B or C

Graphite and diamond are allotropes of carbon.

With reference to their structure and bonding, explain why diamond is hard, has a high melting point and cannot conduct electricity whereas graphite is soft, has a high melting point and can conduct electricity.