Oxford Cambridge and RSA

AS Level Chemistry A

H032/01 Breadth in chemistry

MCQ Question Set 3
3.1 The periodic table

Multiple Choice Questions

1. Which element has the highest melting point?

A silicon

B phosphorus

C sulfur

D chlorine

Your answer ☐

[1]

2. What is the best explanation for the trend in boiling points down the halogens group?

A The covalent bonds become stronger.

B The hydrogen bonds become stronger.

C The permanent dipole–dipole interactions become stronger.

D The induced dipole–dipole interactions (London forces) increase.

Your answer ☐

[1]

3. Which silver compound is insoluble in concentrated $NH_3(aq)$?

A $AgNO_3$

B $AgCl$

C AgBr

D AgI

Your answer ☐

[1]

4. What determines the order of elements in the Periodic Table?

A first ionisation energy

B number of electrons in the outer shell

C number of protons in the nucleus

D relative atomic mass

Your answer ☐

[1]

5. The first five successive ionisation energies of an element **Y** are shown below.

1st	2nd	3rd	4th	5th
496	4563	6913	9544	13352

What is the formula of a chloride of **Y**?

A **Y**Cl

B **Y**Cl_2

C **Y**Cl_3

D **Y**Cl_4

Your answer ☐

[1]

6. Which element has induced dipole–dipole interactions (London forces) in its solid lattice?

A boron

B magnesium

C silicon

D sulfur

Your answer ☐

[1]

7. Which statement about the periodic table is **not** correct?

A The elements are arranged in groups with similar chemical properties.

B The elements are arranged in periods with repeating trends in properties.

C The elements are arranged in order of increasing atomic number.

D The elements in the halogen group increase in reactivity down the group.

Your answer ☐

[1]

Total Marks for Question Set 3: 6

OCR
Oxford Cambridge and RSA

Copyright Information

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact The OCR Copyright Team, The Triangle Building, Shaftesbury Road, Cambridge CB2 8EA.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge