

Extraction of metals

Question Paper

Level	O Level
Subject	Chemistry
Exam Board	Cambridge International Examinations
Topic	Metals
Sub-Topic	Extraction of metals
Booklet	Question Paper

Time Allowed: 8 minutes

Score: /7

Percentage: /100

- 1 In the extraction of aluminium by electrolysis, its oxide is dissolved in molten cryolite. Cryolite is a sodium salt.

Aluminium is deposited at the1..... and it can be deduced that aluminium is2..... sodium in the reactivity series.

Which words correctly complete gaps 1 and 2?

	1	2
A	+ve electro d	above
B	+ve electro d	below
C	-ve electro d	above
D	-ve electro d	below

- 2 Metals usually occur in their ore combined with another element.

Which metal is least likely to occur combined with another element?

- A** aluminium
- B** calcium
- C** magnesium
- D** silver

- 3 Which element can only be extracted from its ore using electrolysis?

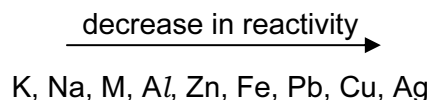
- A** calcium
- B** copper
- C** lead
- D** silver

- 4 Scrap iron is often recycled.

Which reason for recycling is **not** correct?

- A** It reduces the amount of pollution at the site of the ore extraction.
- B** It reduces the amount of waste taken to landfill sites.
- C** It reduces the need to collect the scrap iron.
- D** It saves natural resources.

- 5 The position of metal M in the reactivity series is shown.



Which method will be used to extract M from its ore?

- A electrolysis of its aqueous sulfate
 - B electrolysis of its molten oxide
 - C reduction of its oxide by heating with coke
 - D reduction of its oxide by heating with hydrogen
- 6 Some metals can be obtained by the reduction of their oxides with hydrogen.

Which line of the table is correct?

	aluminium	copper	silver	sodium
A	✓	✓	x	x
B	x	✓	✓	x
C	x	x	✓	✓
D	✓	x	✓	x

key

✓ = can be obtained

x = cannot be obtained

- 7 Which statement is **not** a reason for the importance of recycling aluminium?
- A Aluminium is a rare metal in the Earth's crust.
 - B The demand for aluminium continues to rise annually.
 - C The extraction of aluminium from its ore is expensive.
 - D The properties of aluminium make it one of the most useful of all metals.