

22 Four metal oxides are listed.

- 1 Al_2O_3
- 2 CaO
- 3 CuO
- 4 ZnO

Which metal oxides are amphoteric?

- A** 1 and 4 **B** 1 only **C** 2, 3 and 4 **D** 2 and 3 only

IGCSE Chemistry: **w25 22**

21 Phosphorus is an element in Group V of the Periodic Table.

It burns in air to form an oxide that dissolves in water to form a solution with a pH of 1.

Which row describes this oxide of phosphorus?

	metal oxide	non-metal oxide	acidic oxide	basic oxide
A	✓	✗	✓	✗
B	✓	✗	✗	✓
C	✗	✓	✓	✗
D	✗	✓	✗	✓

key

✓ = yes

✗ = no

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25 Which metal oxide reacts with aqueous sodium hydroxide to form a salt and water?

- A** calcium oxide
- B** copper(II) oxide
- C** sodium oxide
- D** aluminium oxide

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20 Which three oxides are **all** acidic?

- A** CaO , NO_2 , SO_2
- B** CaO , CO_2 , Na_2O
- C** CO_2 , NO_2 , SO_2
- D** CO_2 , Na_2O , SO_2

20 Which row identifies an acidic oxide, a basic oxide and an amphoteric oxide?

	acidic	basic	amphoteric
A	ZnO	SO ₂	Al ₂ O ₃
B	SO ₂	Al ₂ O ₃	Na ₂ O
C	ZnO	Al ₂ O ₃	SO ₂
D	SO ₂	Na ₂ O	Al ₂ O ₃

23 Element E is a metal in Group I of the Periodic Table and element G is a non-metal in Group VII. Both of these elements form oxides.

Which statement about their oxides is correct?

- A** Both oxides are acidic.
- B** Both oxides are basic.
- C** The oxide of E is acidic and the oxide of G is basic.
- D** The oxide of G is acidic and the oxide of E is basic.