

## Unit 9: Inorganic chemistry

### Subunit 9.1: Periodicity of physical properties of the elements in Period 3

#### Topical Question No: 1

- 12 Consecutive elements **X**, **Y** and **Z** are in Period 3 of the Periodic Table. Element **Y** has the highest first ionisation energy and the lowest melting point of these three elements.

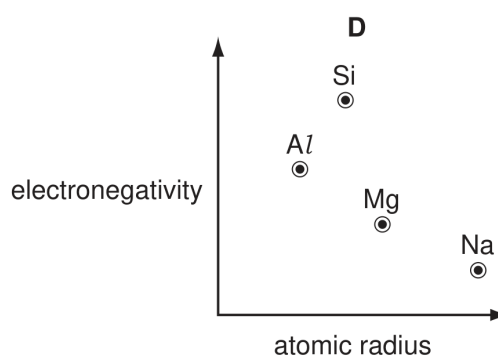
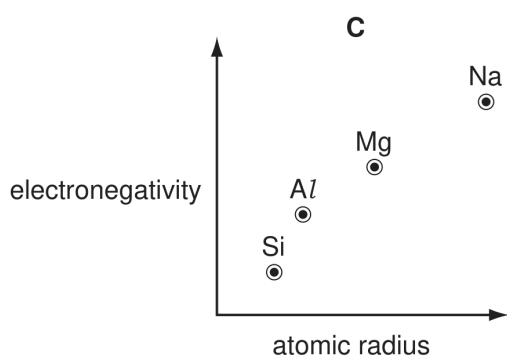
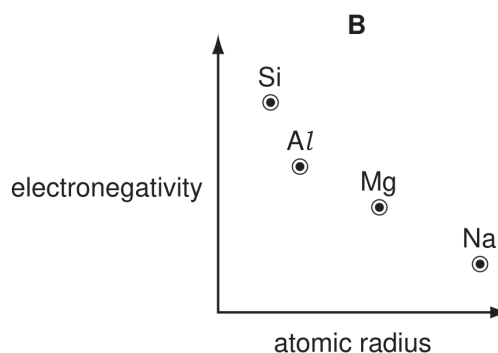
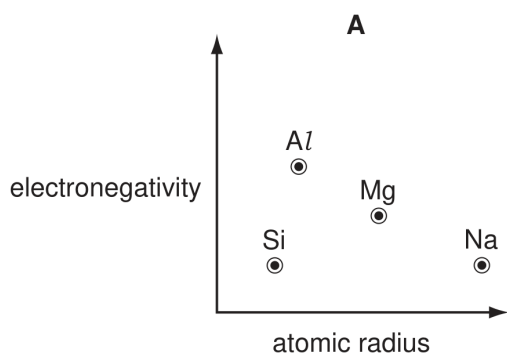
What are the identities of **X**, **Y** and **Z**?

- A sodium, magnesium, aluminium
- B magnesium, aluminium, silicon
- C aluminium, silicon, phosphorus
- D silicon, phosphorus, sulfur

#### Topical Question No: 2

- 19 Use of the Data Booklet is relevant to this question.

Which graph correctly shows relative electronegativity plotted against relative atomic radius for the elements Na, Mg, Al and Si?



## Answer Key

1. Error
2. Error