



St Andrew's Junior College

H1 Chemistry 2021

Tutorial: The Periodic Table (Tutor's copy)

1. N2011/1/14

14 Which statement concerning only the elements in the third period, sodium to argon, is correct?

- A The element that has exactly four atoms in its molecule is sulfur.
- B The element with the highest electrical conductivity is aluminium.
- C The element with the highest melting point is aluminium.
- D The element with the largest anion is chlorine.

- The molecule with 4 atoms is P_4 . Sulfur is S_8 .
- Aluminium is a giant metallic lattice structure with the most number of delocalized electrons hence it has the most mobile charge carriers to conduct electricity.
- The element with the highest melting point is Silicon as it is a giant covalent molecule with strong covalent bonds.
- The element with the largest anion is P^{3-} .

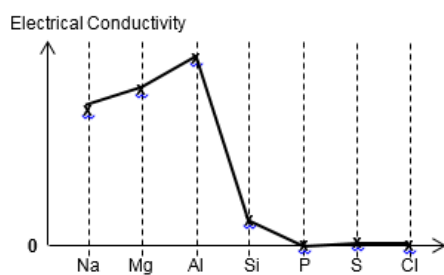
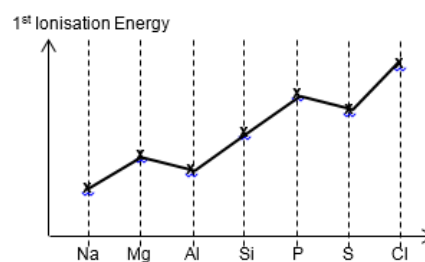
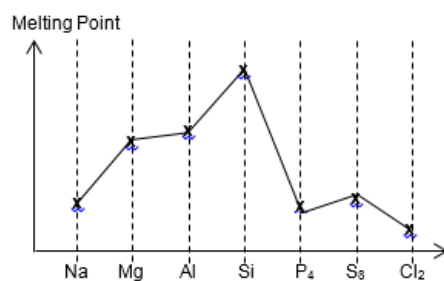
Ans : B

2. N2013/1/13

For the elements in the third period of the Periodic Table, which property decreases consistently from sodium to chlorine?

- A electrical conductivity
- B ionisation energy
- C melting point
- D radius of the atom

Ans : D

AVariation of Electrical Conductivity for Period 3 Elements**B**Variation of 1st Ionisation Energy for Period 3 Elements**C**Variation of Melting Points for Period 3 Elements**D**Variation of Electrical Conductivity for Period 3 Elements