



Class 11 Chemistry | Classification Of Elements And Periodicity In Properties

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. Which has the largest atomic radius?

A. Mg B. Si C. Al D. Na

2. Which species has the smallest radius?

A. F^- B. Na^+ C. Mg^{2+} D. Al^{3+}

3. Which element has the highest electronegativity?

A. F B. Cl C. O D. N

4. First ionisation enthalpy of Mg exceeds that of Al because Mg has:

A. More protons
B. A filled 3s subshell
C. A smaller nuclear charge than Na
D. A larger 3p population

5. First ionisation enthalpy of N exceeds that of O mainly due to:

A. Filled $2p^6$ in N
B. Larger N atom
C. Greater shielding in N
D. Stable half-filled $2p^3$

6. Which has the most negative electron-gain enthalpy among these?

A. I B. Br C. F D. Cl

7. An element ending in $3s^23p^4$ belongs to:

A. Group 14, period 3 B. Group 6, period 2
C. Group 16, period 4 D. Group 16, period 3

8. Across a period, effective nuclear charge generally:

A. Remains zero B. Decreases
C. Increases D. Becomes negative

9. Down group 1, first ionisation enthalpy generally:

A. Becomes zero B. Increases
C. Remains constant D. Decreases

10. Which oxide is most strongly basic?

A. Al_2O_3 B. SO_3 C. Na_2O D. SiO_2

11. Which oxide is amphoteric?

A. Na_2O B. Al_2O_3 C. CO_2 D. SO_2

12. An element with $Z=20$ belongs to which block?

A. f B. d C. p D. s

13. Modern periodic law relates properties primarily to:

A. Atomic number B. Mass number
C. Neutron number D. Atomic mass only

14. Which atom forms the largest anion among these?

A. Cl B. Br C. I D. F

15. Which pair contains isoelectronic species?

A. Ca^{2+} and Mg^{2+} B. Na and Ne
C. O^{2-} and Mg^{2+} D. Cl^- and F^-

ANSWER KEY — check after completing all 15 questions

1.D 2.D 3.A 4.B 5.D 6.D 7.D 8.C 9.D 10.C 11.B 12.D 13.A 14.C 15.C

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper

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