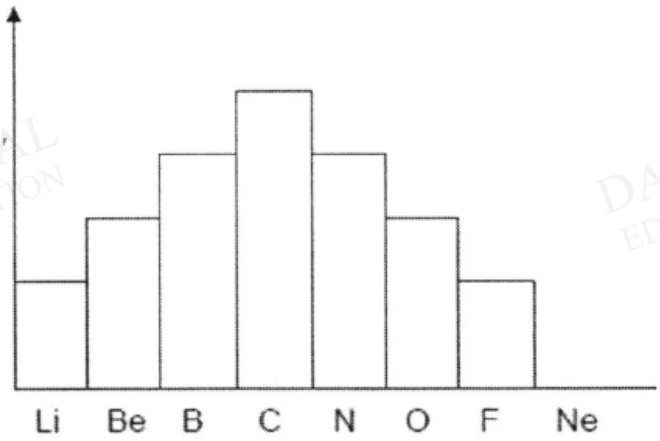
O Level Pure Chemistry MCQs

Periodic Table Test 1.0

Q1

The bar chart shows the period of elements from lithium to neon.



Which is the correct label for the y-axis?

A the atomic number
B the number of electrons involved in bonding
C the number of valence electrons
D the relative atomic mass

Q2

Astatine can be found in Group VII of the Periodic Table.

Which statement is correct?

A Astatine can conduct electricity.
B Astatine forms a soluble silver salt.
C Astatine can form both ionic and covalent compounds.
D Astatine occupies 24 dm^3 at room temperature and pressure.

Q3

Which statement about transition metals is **not** correct?

A Transition metals can behave as catalysts.
B Transition metals have high melting and boiling points.
C Transition metals can have variable oxidation states.
D Transition metals tend to be coloured.

Q4

The element astatine (At) is beneath iodine in Group VII of the Periodic Table.

Which one of the following is a likely property of astatine?

A It can be liberated from a solution of its salt by chlorine gas.
B It conducts electricity in molten state.
C It forms a basic oxide.
D It displaces iodine from aqueous potassium iodide.

Q5

The table below represents 8 elements P, Q, R, S, T, U V and W across Period 2 of the Periodic Table.

$_{3}P$	$_{4}Q$	$_{5}R$	$_{6}S$	$_{7}T$	$_{8}U$	$_{9}V$	$_{10}W$

Which of the following properties is **incorrect**?

A The chlorides of T have high melting points whereas chlorides of P have low melting points.
B The oxides of T are acidic whereas the oxides of P are alkaline.
C P and Q are metals whereas V and W are non-metals.
D V atoms are smaller than P atoms.

Q6

Which statement about groups in the Periodic Table is correct?

A All elements form either positively charged ions or negatively charged ions.

B In Group I, all the elements form covalent compounds with hydrogen.

C In Group VII, all the elements form ionic bonds with most metals.

D All groups contain acidic and basic oxides.

Q7

Going down Group I from lithium to caesium,

A the reactivity decreases.
B the number of electron shells increases.
C the number of valence electrons increases.
D the melting point increases.

Q8

The table below represents 8 elements **P**, **Q**, **R**, **S**, **T**, **U**, **V** and **W** across Period 2 of the Periodic Table.

P	Q	R	S	T	U	V	W

Which of the following is **correct**?

A The chloride of **T** has a high melting point whereas the chloride of **P** has a low melting point.
B The oxide of **S** is alkaline whereas the oxide of **Q** is acidic.
C **P** and **Q** are metals whereas **V** and **W** are non-metals.
D Element **W** forms the most stable compounds.

Q9

The diagram shows the positions of elements Q, R ,S, T, U and V in the Periodic Table

Which of the following statements is correct?

A The valence shell of an atom of R has an octet structure.

B The metallic character of the Period 2 elements increases from S to U.

C T forms an ionic compound with U.

D U is a stronger oxidising agent than V.

Q10

Which of the following statements correctly shows the general trend of the oxides of Period 3 elements from sodium to chlorine?

A The melting points of the oxides increase.

B The electrical conductivities of the molten oxides increase.

C The bonds of the oxides show a trend from ionic to covalent.

D The oxides show a trend from acidic to amphoteric and then to basic.

Answers

Periodic Table Test 1.0

Q1 B

Q2 C

Q3 D

Q4 A

Q5 A

Q6 C

Q7 B

Q8 C

Q9 D

Q10 D