

Chapter 5: Language of Chemistry

Worksheet 1

1. Write T for true and F for false statement.

- (i) The short form of an element is called a symbol.
- (ii) Phosphorus P_4 is a triatomic element.
- (iii) The valency of hydrogen ion is +2.
- (iv) The molecular formula of aluminium phosphate is $AlPO_4$.
- (v) In a balanced chemical equation, the number of molecules of the reactants and products is equal.

2. Fill in the blanks.

- (i) The symbol of aluminium is _____.
- (ii) The valency of phosphorus is _____.
- (iii) A _____ is an atom or a group of atoms having a charge on it.
- (iv) The chemical formula of _____ is HCl.
- (v) The _____ of a compound represents the name of the compound.

3. Match the columns.

Column A	Column B
(i) Boron	(a) C
(ii) Bromine	(b) Cl
(iii) Carbon	(c) B
(iv) Chlorine	(d) Fe
(v) Iron	(e) Br

4. Answer the following questions.

- (i) What represents the molecule of a compound?
- (ii) Write the electronic configuration of beryllium.
- (iii) Find the valency of lithium ion.
- (iv) What are the radicals having positive charge called?
- (v) What is the substance which increases or decreases the rate of a reaction called?

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Worksheet 2

1. Fill in the blanks.

- (i) The symbol of cobalt is _____ .
- (ii) Elements combine with their own atoms or other atoms to form _____ .
- (iii) The radicals having negative charge are called _____ .
- (iv) The valency of calcium ion is _____ .
- (v) The molecular formula of _____ is H_2SO_4 .

2. Name the following.

- (i) The symbol of this element is denoted by Mg.
- (ii) This is expressed with the help of symbols and formulae.
- (iii) This gives the exact number of atoms of each element that combines to make one molecule of a compound.
- (iv) This oxide is the combination of magnesium and oxygen.
- (v) This is formed when two or more different types of elements combine as per their valency.

3. Match the columns.

Column A	Column B
(i) Valency of boron	(a) 1
(ii) Valency of sulphur	(b) 0
(iii) Valency of potassium	(c) 4
(iv) Valency of silicon	(d) 2
(v) Valency of helium	(e) 3

4. Answer the following questions.

- (i) What is the mass of an atom called?
- (ii) What is the valency of silver ion?
- (iii) Write the molecular formula of nitric acid.
- (iv) Which metal is used as a catalyst in the preparation of NH_3 ?
- (v) What is the law of conservation of mass?