

1st Term Worksheet

Subject – Chemistry

Class – VI

Name :

Sec. :

Chapter – 2

[Elements, Compounds and Mixtures]

Check Point:

[A] Answer the following questions: [36]

1. Write the symbols of the following elements:

Calcium : _____ Aluminium : _____

Zinc : _____ Sulphur : _____

Oxygen : _____ Chlorine : _____

2. Mention two important differences between metals and non-metals.

Ans. _____

3. Write the elements which are represented by the following symbols.

Fe _____ Zn _____

Cu _____ Mg _____

Pb _____ Ca _____

O _____ H _____

C _____ N _____

S _____

4. Write the formulae of the compounds in the following cases:

- a. A molecule of calcium oxide consists of one atom of calcium and one atom of oxygen.

- b. A molecule of zinc sulphide consists of one atom of zinc and one atom of sulphur.

- c. A molecule of copper sulphate consists of one atom of copper, one atom of sulphur and four atoms of oxygen.

5. What does $2\text{H}_2\text{O}$ represent?

Ans. _____

6. What does the formula of a substance signify?

Ans. _____

[B] Fill in the blanks: [40]

1. Mixture contains two or more elements, or compounds or _____.

2. Constituents of mixtures _____ their properties.

3. Constituents of _____ do not retain their properties.

- 4. Milk is an example of _____.
- 5. Elements and compounds are _____ substances, while mixtures are _____ substances.

[C] Answer the following questions: [40]

- 1. What are mixtures?

Ans. _____

- 2. Classify the following into mixtures and compounds:
Air, Water, Iron Sulphide, Ice cream, Common salt solution with water, Brass, Milk, Blood

Ans. _____

- 3. State two differences between compounds and mixtures.

Ans. _____

- 5. What is the need for separating the constituents of a mixture?

Ans. _____

- 6. Write names of first five elements of Periodic Table along with their symbols.

Ans. _____

[D] Fill in the blanks: [48]

- 1. Grass is separated from mint leaves by _____.
- 2. The most convenient method to separate the broken pieces of rice from whole rice is _____.
- 3. The method used to settle down the suspended particles in muddy water is called _____.
- 4. To kill the bacteria in water, _____ rays are used.
- 5. In water filters used at home, the filter candle is made from _____.

[E] Answer the following questions:

[48]

1. How will you separate a mixture of iron dust and sulphur powder?

Ans.

2. A carpenter wants to separate iron nails from saw dust. Which method of separation should he choose?

3. What type of mixture can be separated by using winnowing?

Ans.

4. What is separated by using handpicking?

Ans.

5. Which technique is used to separate two immiscible liquids having different densities?

Ans.

Keywords:

Compound: _____

Element: _____

Homogeneous mixture: _____

Heterogeneous mixture: _____

Mixture: _____

Molecules of compounds: _____

Molecules of elements: _____

Sieving: _____

Symbol: _____

Crystallization: _____

Sublimation: _____

Winnowing: _____

Decantation: _____

Distillation: _____

Sedimentation: _____

Filtration: _____

Exercise:**[50-51]**

[A] Multiple Choice Questions: [50]

- (i) The most abundantly occurring element on the earth is
- (a) oxygen (b) silicon
(c) aluminium (d) hydrogen
- (ii) In a compound, elements are always present in a
- (a) fixed ratio (b) variable ratio
(c) any of the two (d) none of these
- (iii) A mixture of ammonium chloride and sand is separated by
- (a) evaporation (b) decantation
(c) filtration (d) sublimation
- (iv) A mixture of alcohol and water can be separated by
- (a) filtration (b) separating funnel
(c) distillation (d) evaporation
- (v) The constituents of a mixture are present in
- (a) fixed ratio (b) any ratio
(c) variable ratio (d) none of these
- (vi) Fractional distillation is used to separate
- (a) solids from solids (b) solids from liquid
(c) liquids from liquids (d) none of these
- (vii) During filtration, the substance left behind on the filter paper is called:
- (a) residue (b) filtrate
(c) solution (d) none of these

[B] Find the odd one out: [50]

1. Condensation, evaporation, sublimation, solidification

2. Gold, silver, sulphur, copper

3. Filtration, evaporation, loading, crystallisation

[C] Fill in the blanks: [50]

1. An element is made of only one kind of _____.

2. A molecule of nitrogen consists of _____ atoms of the element nitrogen only.

3. A compound is formed by the combination of at least _____ elements.

4. Pure crystals of common salt are obtained by _____ and crystallization.

5. Two immiscible liquids are separated by using _____.

6. Peanuts are separated from a mixture of wheat and peanuts by _____.

7. _____ is used to separate husk from wheat.

[D] Write T for true and F for false statements: [50]

1. Symbol of a chemical element denotes one atom of that element. _____

2. The components of a compound cannot be separated by applying chemical methods.

3. The process of winnowing is used to remove small stone particles from wheat. _____

4. Common salt is separated from its solution in water by decantation. _____

5. Cream is separated from milk by sieving. _____

[E] Match the Column A with Column B: [51]

- | | |
|--------------------|--|
| 1. Element | a. changes from solid to liquid |
| 2. Sublimation | b. one type of atom |
| 3. Melting | c. changes from gas to liquid |
| 4. Non-metals | d. changes from solid to gas state |
| 5. Condensation | e. do not allow heat and electricity to pass through |
| 6. Crystallization | f. particles are allowed to settle down slowly |
| 7. Distillation | g. saturated solution is cooled |
| 8. Loading | h. the liquid evaporates |
| 9. Evaporation | i. involves condensing the vapour |
| 10. Sedimentation | j. weighing down of solid particles by using alum |

[F] Answer the following questions: [51]

1. Define element.

Ans- _____

2. Define condensation and melting.

Ans- _____

3. Classify the following as 'elements' or 'compounds':
Iron, Sodium, Washing soda, Chalk, Sulphur, Urea

Ans-

4. Name three commonly known mixtures, the components of which are useful after separation.

Ans-

5. Which method would you use for separating a solid substance dissolved in water? Both the components are to be collected.

Ans-

6. How will you separate iodine and salt from a mixture?

Ans-
