

SCIENCE

IS MATTER AROUND US PURE?

CHAPTER 2 CHEMISTRY
CLASS 9

IMPORTANT QUESTIONS

Ques1: Differentiate between:

- (a) Pure substance and Impure substances
- (b) Metals and Non Metals
- (c) Mixtures and Compounds
- (d) Elements and Compounds
- (e) Homogeneous and Heterogeneous Mixtures
- (f) Solution and Suspension
- (g) Physical changes and Chemical changes
- (h) Miscible and Immiscible liquids

Ques2: 'Colloidal solution appears to be homogeneous but actually it is heterogeneous.' Give justification for this statement.

Ques3: Calculate the mass of water and mass of glucose required to make 250 g of 40% solution of glucose.

Ques4: A solution contains 40 g of common salt in 320 g of water. Calculate the concentration in terms of mass by mass percentage of the solution.

Ques5: A solution is prepared by adding 40 g of sugar in 100 g of water. Calculate the concentration in terms of mass by mass percentage of solution.

Ques6: What volume of ethyl alcohol and water must be mixed together to prepare 250 ml of 60% by volume of alcohol in water.

Ques7: A solution contains 50 g of sugar in 350 g of water. Calculate the concentration of solution in terms of mass by mass percent of the solution.

Ques8: State and Explain the separation technique used for the separation of the following:

a. Ammonium chloride from a mixture containing sodium chloride and ammonium chloride

b. Copper sulphate from its solution in water.

c. Two Immiscible liquids

d. Iron filings and sulphur

FILL IN THE BLANKS:-

1. Common salt is _____.

2. A mixture contains more than _____ substance mixed in _____ proportion.

3. Properties of a _____ are different from its constituent elements, whereas a _____ shows the properties of its constituting elements.

4. A solution is defined as a mixture that is-----.

5. We can remove salts from a solution by using the process of -----

6. A pure substance has a fixed _____ or _____ at constant temperature.

7. An element is made up of only one kind of _____.

8. Miscible liquids are separated by _____ .

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9. Immiscible liquids are separated by using a _____.
 10. Filtered tea is a _____ mixture.
 11. Alloy is a _____.
 12. Sublimation of camphor is a _____ change.
 13. Most common chemical change we observe in our routine life is rusting of _____.

TRUE / FALSE

1. Water is a homogeneous substance.
2. Element is always metal.
3. Substance is always homogeneous
4. In compound elements combine in definite proportion.
5. Iodine can be purified by sublimation.
6. Mixtures are always combinations of the same compounds that are at different states.
7. We can separate all mixtures by filtration.
8. All mixtures are defined as "heterogeneous"
9. Only specific compounds can be combined to form mixtures.
10. No pure elements are liquids at room temperature.
11. Mixtures are combinations of one or more compounds that can be separated with chemical processes.
12. Crystals can be made of mixtures.

