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21/12/20
KRITI GUPTA

classmate

Date _____

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IS MATTER AROUND US PURE?

9th

Substance → it consists of a single type of particles. They are classified as elements or compounds.

Mixture → intermixing of two or more particles in any proportion to form a compound.

Solution → it is a homogeneous mixture. Particles of solid solute are so small that cannot be seen with naked eyes e.g. sugar in water.

Concentration → the amount of solute that has been dissolved in a given amount of solvent or solution.

Suspension → it is a heterogeneous mixture. True particles can be seen with naked eyes. Suspension is unstable. e.g. chalk powder and water.

Colloid → it is a heterogeneous mixture. Individual particles cannot be seen with naked eyes. They are quite stable. e.g. milk.

Element → it is a simpler substance which cannot be broken into smaller particles by chemical reaction.

Compound → a substance made up of two or more elements e.g. Water (H_2O)

Saturated solution → it is a solution in which the maximum amount of solute has been dissolved at a given temperature.

Solubility → the ability of a solute to mix in a solvent to form a solution.

KRITI GUPTA
IX - A



Class 9th

Maximum Marks: 44

(1x12=12)

Is Matter Around Us Pure

Q1) Define:

- a) Substance
- b) Mixture
- c) Solution
- d) Concentration of a solution
- e) Suspension
- f) Colloid
- g) Element
- h) Compound
- i) Saturated solution
- j) Solubility
- k) Unsaturated solution
- l) Tyndall Effect

Q2) What we call "pure milk" is actually a mixture. Explain (2)

Q3) Differentiate between: (Giving examples) (2x4=8)

- a) Heterogeneous and Homogeneous Mixtures
- b) Mixtures and Compounds
- c) Compounds and Elements
- d) Sol, Solution and Suspension

Q4) Do solid and gaseous solutions also exist? If yes, give examples. (2)

Q5) Enlist the properties of the following: (2x3=6)

- a) Solution
- b) Suspension
- c) Colloid

Q6) Which separation technique will you apply for the separation of the following? (1x6=6)

- a) Dye from Ink
- b) Mixture of sodium chloride and ammonium chloride
- c) Pigments from an extract of flower petals.