## What is mixture?

## Solution.

A mixture is a combination of two or more pure substances in which each pure substance retains its individual chemical properties. Chemical bonds between the components are neither broken nor formed. Mixtures can be composed of solids, liquids, or gases. Note that even though the chemical properties of the components haven't changed, a mixture may exhibit new physical properties, like boiling point and melting point.

Examples of Mixtures:

- Flour and sugar may be combined to form a mixture.
- Sugar and water form a mixture.
- Marbles and salt may be combined to form a mixture.
- Smoke is a mixture of solid particles and gases.

## Types of Mixtures:

Two broad categories of mixtures are heterogeneous and homogeneous mixtures. Heterogeneous mixtures are not uniform throughout the composition (e.g. gravel), while homogeneous mixtures have the same phase and composition, no matter where you sample them (e.g., air). The distinction between heterogeneous and homogeneous mixtures is a matter of magnification or scale.