

Matter

2. Separating mixtures

CONCEPT 1

PURE SUBSTANCES AND MIXTURES

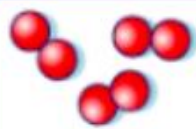


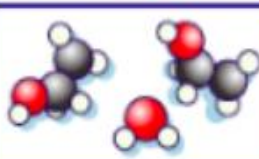
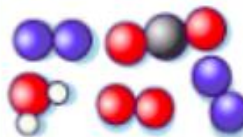
NOTES

A **pure substance** contains only one type of particle. Elements e.g. gold Au and oxygen O₂, and compounds e.g. water H₂O and carbon dioxide CO₂ are pure substances.

A **mixture** is made up of two or more pure substances mixed together. Fruit juice and sea water are mixtures. The amounts of each substance in a mixture can vary. Mixtures only have the properties of the substances in the mixture.

An **element** is a pure substance made up from one type of atom e.g. copper Cu, oxygen O, neon Ne.

A **compound** is a pure substance consisting of two or more elements chemically joined together e.g. carbon dioxide CO₂ (carbon and oxygen), water H₂O (hydrogen and oxygen), sodium chloride NaCl (sodium and chlorine).

Diagram	Description	Example
	Pure element	oxygen
	Pure compound	carbon dioxide
	Mixture of elements	oxygen and helium
	Mixture of compounds	alcohol and water
	Mixture of elements and compounds	air