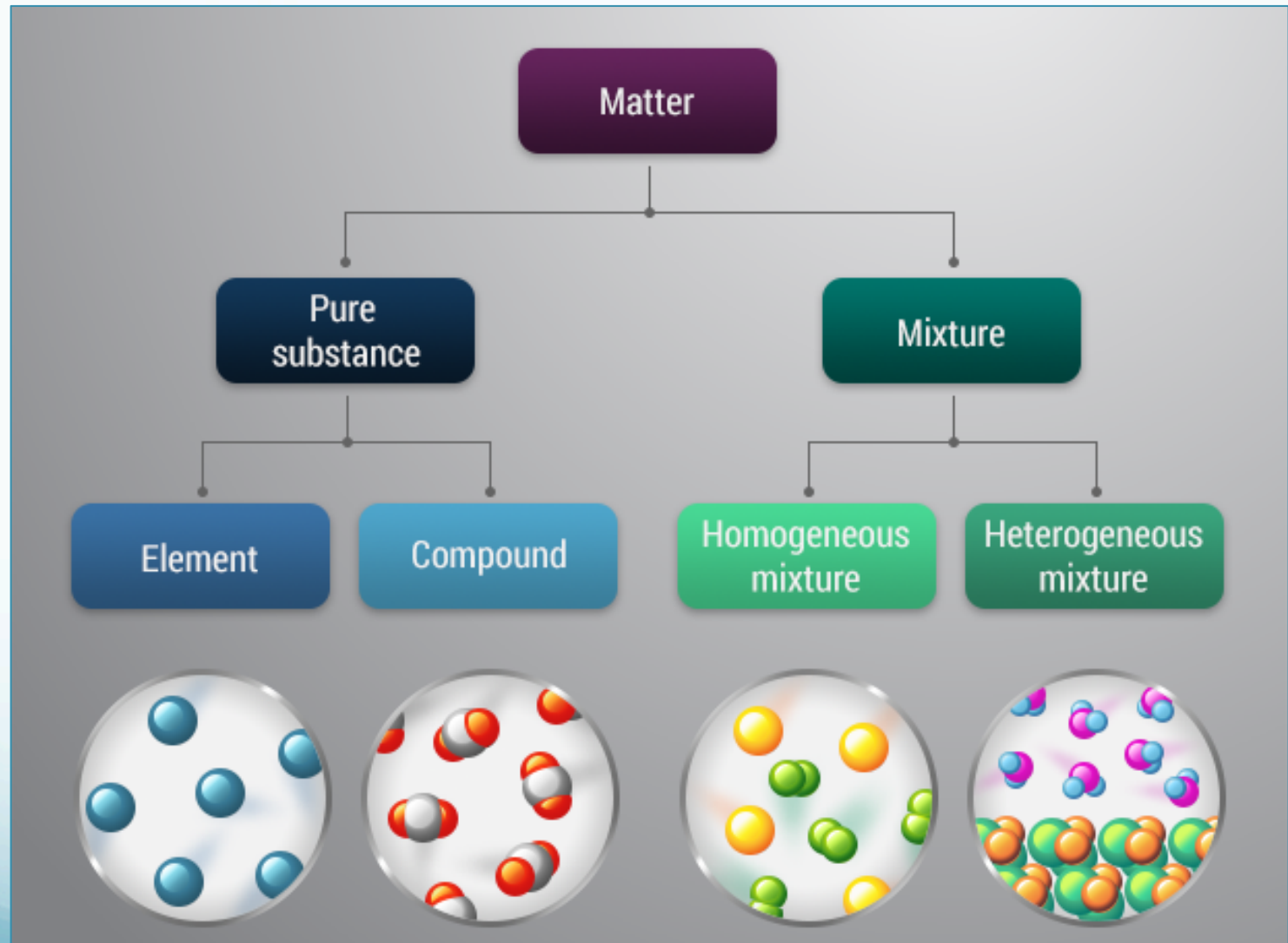


MATTER

SEPARATION OF MIXTURES AND CHEMICAL REACTIONS



TYPES OF MATTER



TYPES OF MATTER

PURE SUBSTANCES

Pure Substances

Chemical Elements



Tin



Sulfur



Diamond

Compounds



Sugar



Water



Baking Soda

Crystals



Salt



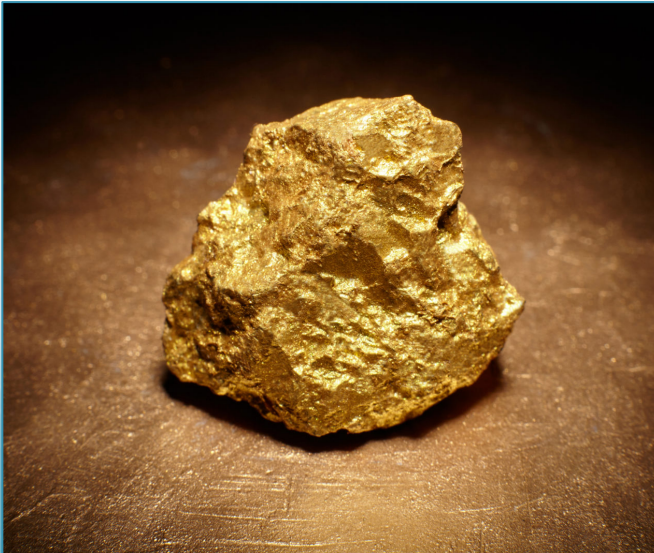
Protein Crystals



Copper Sulfate Crystals

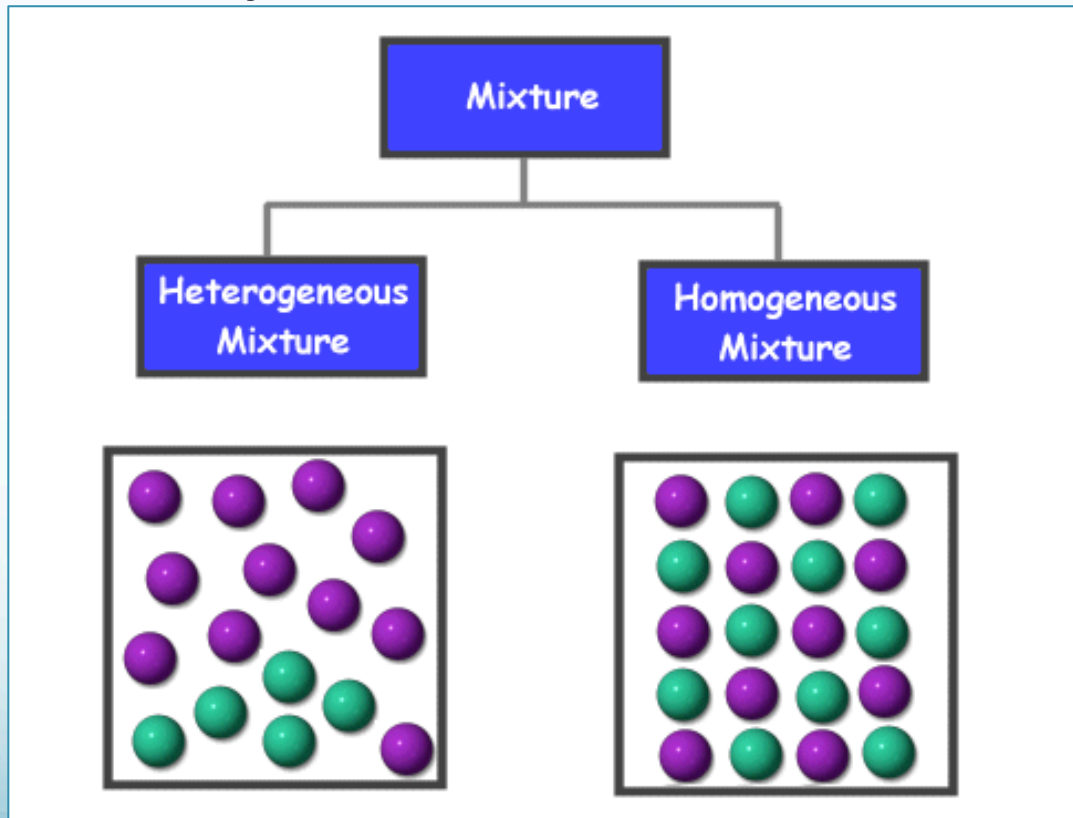
TYPES OF MATTER

PURE SUBSTANCES



TYPES OF MIXTURES

A mixture is what you get when you combine **two substances** in such a way that **no chemical reaction occurs** between the components and you can separate them again. In a mixture, each component maintains its own chemical identity.



TYPES OF MIXTURES

MIXTURES

Heterogeneous Mixture

VS

Homogeneous Mixture



particles distributed non-uniformly



particles distributed uniformly



Cereal in milk



Ice in soda



Vodka



Steel



Soil



Blood



Air

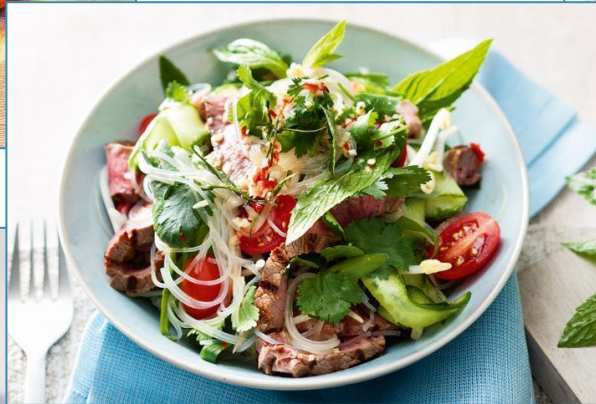


Rain

ThoughtCo.

TYPES OF MIXTURES

HETEROGENEOUS MIXTURES



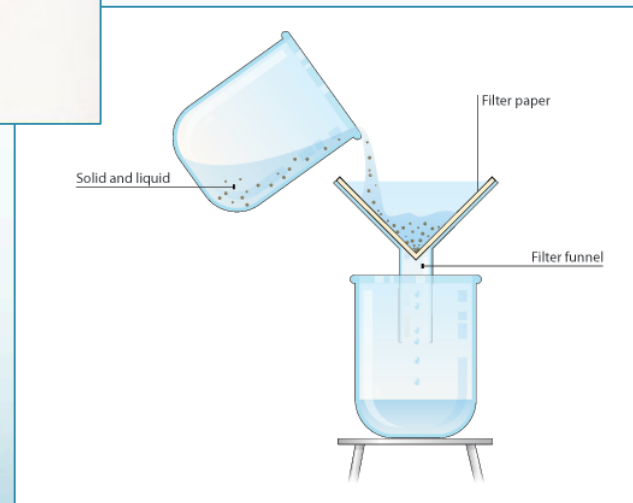
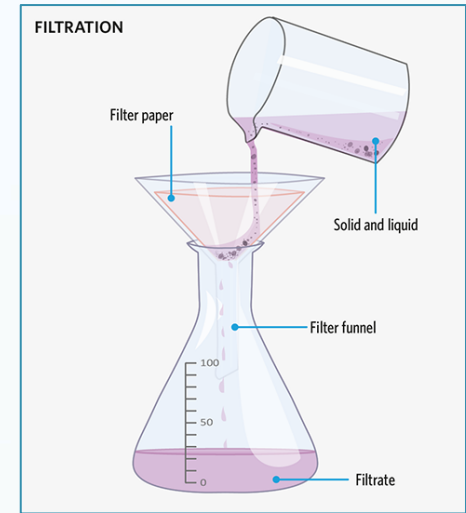
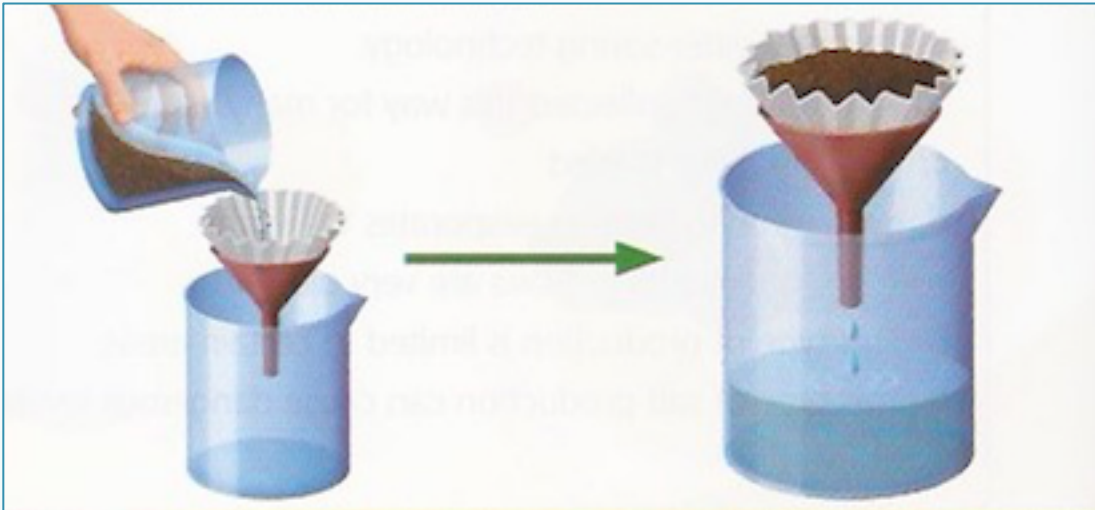
TYPES OF MIXTURES

HOMOGENEOUS MIXTURES



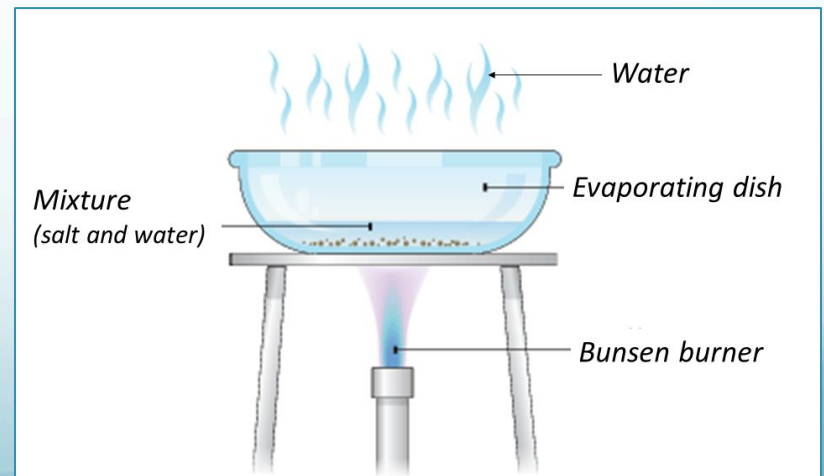
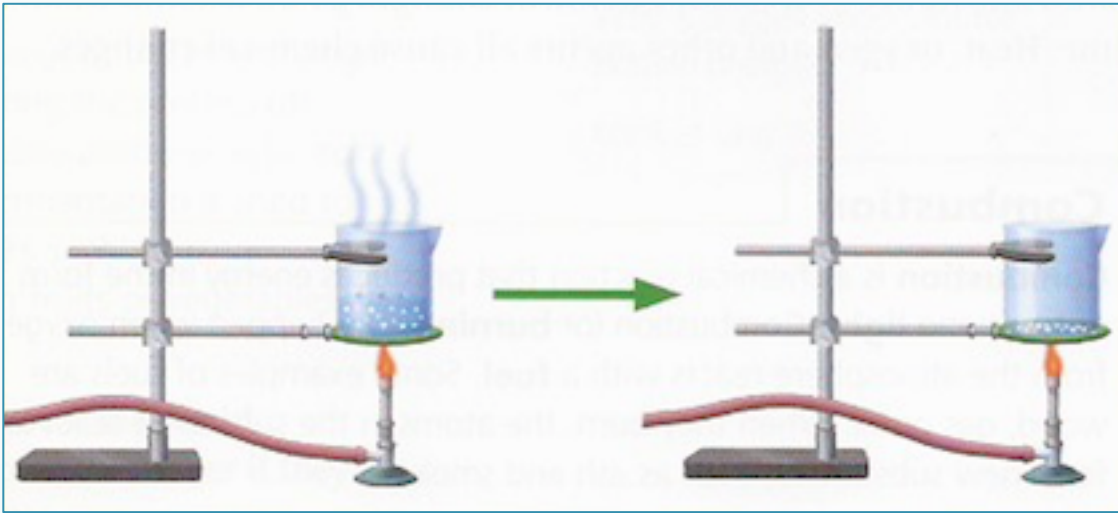
SEPARATION OF MIXTURES

1. FILTRATION



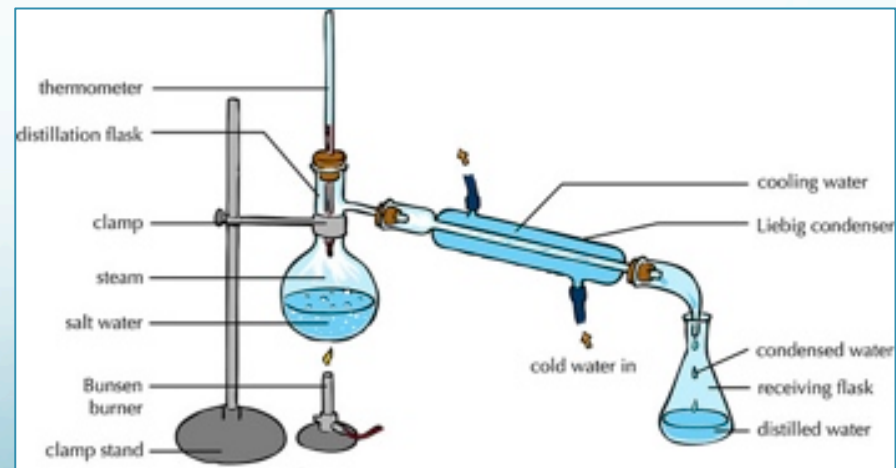
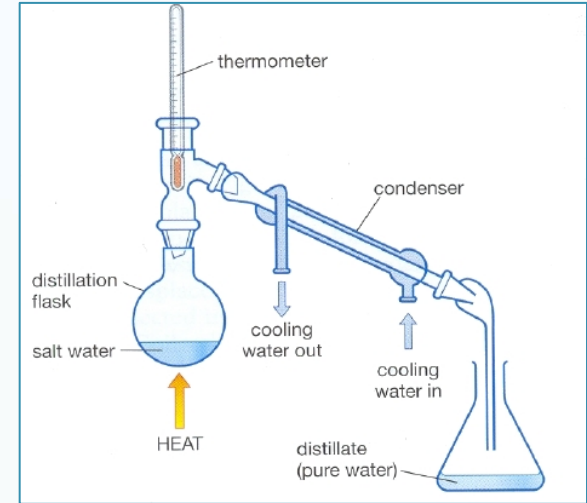
SEPARATION OF MIXTURES

2. EVAPORATION



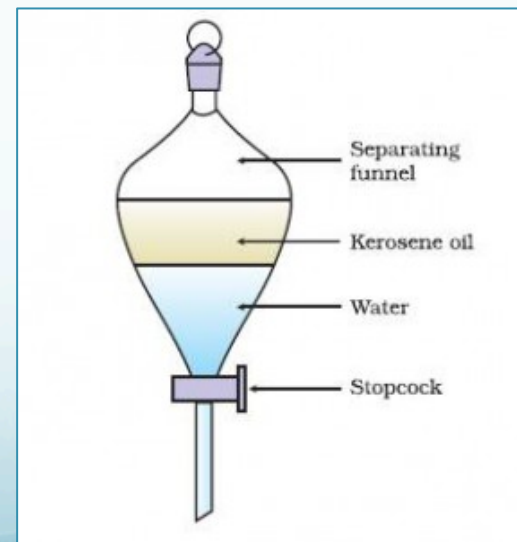
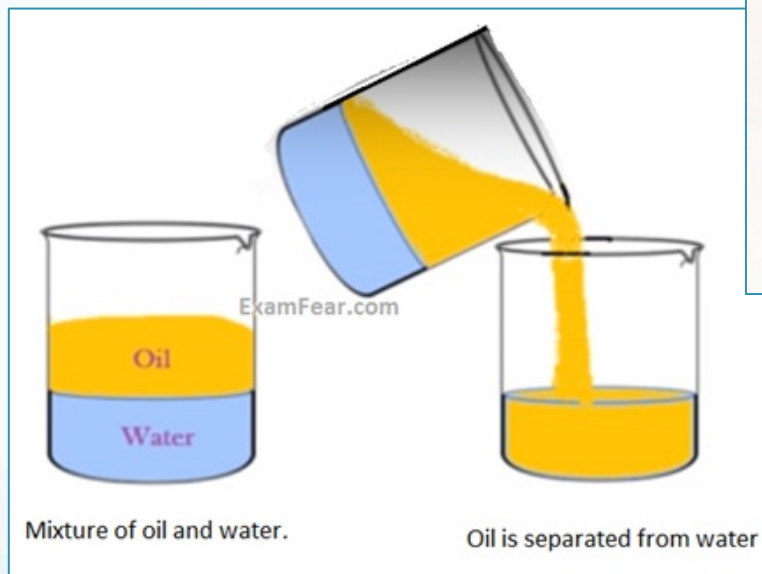
SEPARATION OF MIXTURES

3. DISTILLATION



SEPARATION OF MIXTURES

4. DECANTATION



PHYSICAL CHANGES

Physical Changes



Crushing a can



Melting an ice cube



Boiling water



Mixing sand with water



Breaking glass



Dissolving sugar in water



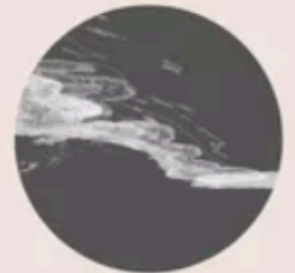
Shredding paper



Chopping wood



Mixing green and red marbles



Sublimation of dry ice

CHEMICAL CHANGES

Chemical Changes



Iron Rusting



Burning Wood



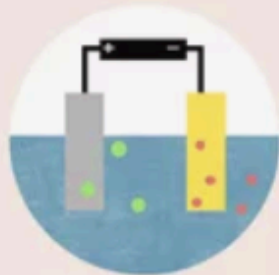
Metabolism



Cooking an Egg



Baking a Cake



Electroplating



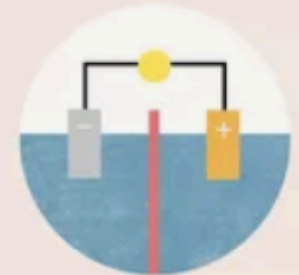
Rotting Banana



Vinegar and Baking Soda Mixture



Fireworks



Chemical Battery

SEPARATION OF MIXTURES

HETEROGENEOUS MIXTURES