

CHEMISTRY STUDY MATERIALS FOR CLASS 9

(NCERT based Revision Notes on Chapter - 2)

GANESH KUMAR

DATE:- 30/07/2020

Is Matter Around Us Pure

Separation of components of a mixture

- Heterogeneous mixtures can be separated into their constituents by simple **physical methods**.
- **Methods include:** handpicking, sieving, filtration.



Handpicking



Sieving

The components of a mixture can be separated from each other using several other techniques like:

(i) Evaporation

(ii) Centrifugation

(iii) Sublimation

(iv) Chromatography

(v) Distillation

1. Evaporation – For separating a mixture of a non-volatile and a volatile substance



• Applications:

- ✚ Separating coloured component from the ink
- ✚ Salt from water
- ✚ Sugar from Water

Method:

Mix some ink into water and heat it. After some time the water will evaporate leaving behind the coloured substance.

2. Centrifugation – Separating dense particles from lighter particles

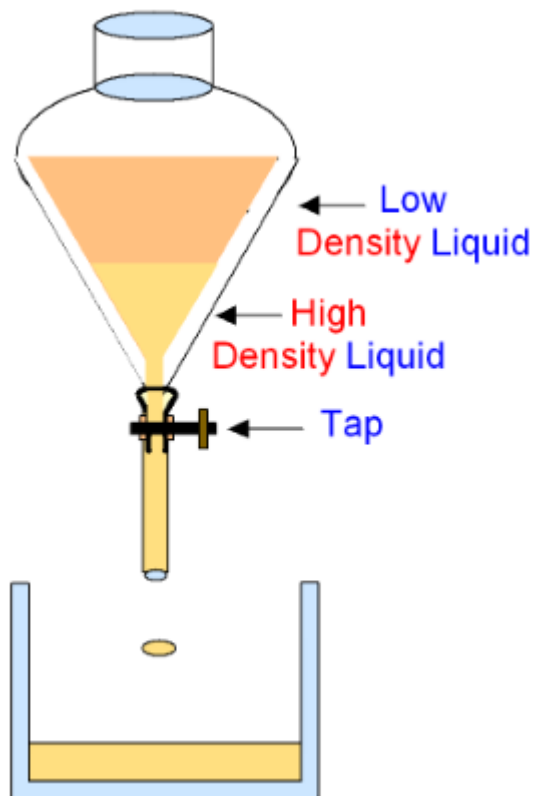
Applications:

- ✚ Separating milk from cream
- ✚ Separating butter from cream
- ✚ Squeezing out water from wet clothes

Method:

Milk is put in a centrifuging machine or milk churner and the cream thus separates from milk.

3. Using a Separating funnel – To separate two immiscible liquids



- **Applications:**

- ✚ Oil from water
- ✚ Iron and iron ore

Method:

The immiscible liquids are allowed to settle in the funnel. They soon form separate layers due to varying densities. The first liquid is allowed to flow out of the funnel and as soon as it is completely poured out, the stopcock is closed thereby separating the two liquids from each other.
