

The National Orthodox School /Shmaisani

Subject: Science/ Chemistry

Study sheet: Separating mixtures Name:

Grade-Section: 7CS Date:

Objective: To be able to find the best separation method for different mixtures.

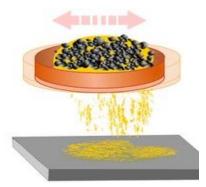
1- Sieving

To separate large particles from small particles.:

The small particles will pass through the holes of the sieve, large particles will not pass through the holes.



















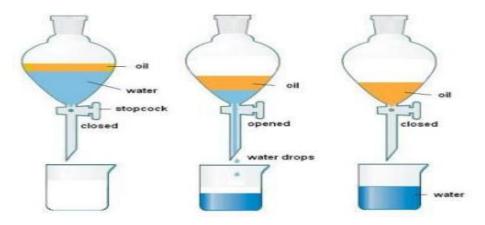




2- Decanting

✓ To separate <u>liquids that form layers</u>. https://www.youtube.com/watch?v=EFiFPoOzqtk

Ex: oil& water

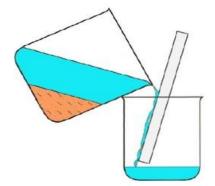


✓ To separate <u>liquids from INSOLUBLE solids (large insoluble particles)</u>.

https://www.youtube.com/watch?v=a0-JcyEVWpE

Ex: Sand& water

The process at which the liquid is poured slowly from the insoluble solid.

















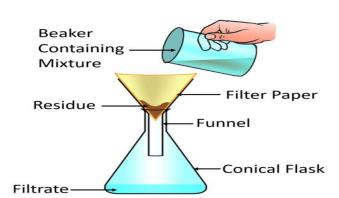
3-Filtering https://www.youtube.com/watch?v=vi_SJBnxmHo

To separate liquids from insoluble solid (small insoluble particles)

Filter paper is a thin paper that allows only liquid particles to pass through it.

For example When a mixture of sand and water is filtered:

- the sand stays behind in the filter paper (it becomes the residue)
- the water passes through the filter paper (it becomes the filtrate)



4-Evaporating

https://www.youtube.com/watch?v=vi SJBnxmHo

A method that is used to separate a SOLUBLE solid from a liquid.

For example, copper sulfate is soluble in water – its crystals dissolve in water to form copper sulfate solution. During evaporation, the water evaporates away leaving solid copper sulfate crystals behind.







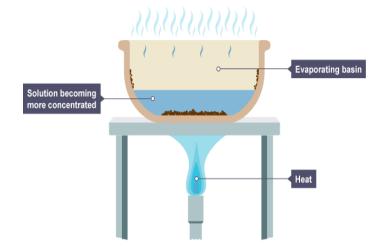


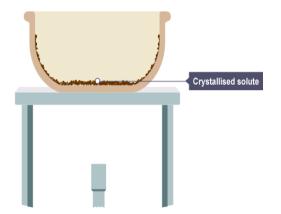












The volume of the solution has decreased because some of the water has evaporated. Solid particles begin to form in the basin

All the water has evaporated, leaving solid crystals behind.













