

IS MATTER AROUND US PURE

SUBJECT-CHEMISTRY

CHAPTER-02

CHAPTER NAME-IS MATTER AROUND US PURE

CHANGING YOUR TOMORROW



TRADITIONAL METHODS OF SEPARATION

Separation process:

The process of separating the constituent substances of a mixture by physical methods, taking advantage of the differences in their physical properties is called separation process.

- ❖ Magnetic Separation
- ❖ Winnowing
- ❖ Sieving
- ❖ Threshing
- ❖ Filtration
- ❖ Evaporation

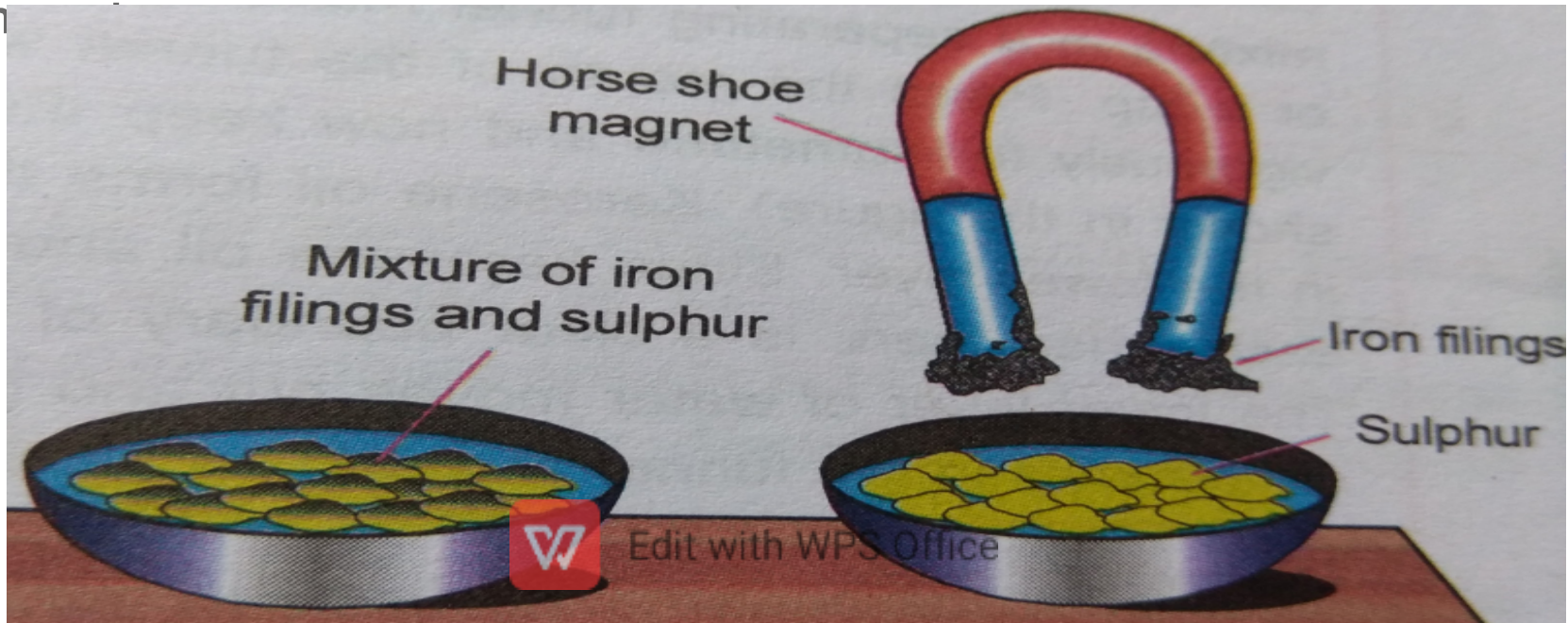


MAGNETIC SEPARATION

- **Magnetic Separation:**

This method is used when one of the components is magnetic.

Example: The mixture of iron filings and sulphur powder can be separated by using magnet.



WINNOWER, SIEVING AND THRESHING

Threshing:

- The process of separating grains from chaffs by beating on the ground.
- It can be done by a thresher.

Winnower:

- The method of separating the lighter chaff from the heavier grains by the help of air.

Sieving:

- The method of separating solid-solid mixture by using a sieve.
- Pebbles are removed from the sand to make fine by the method of sieving.

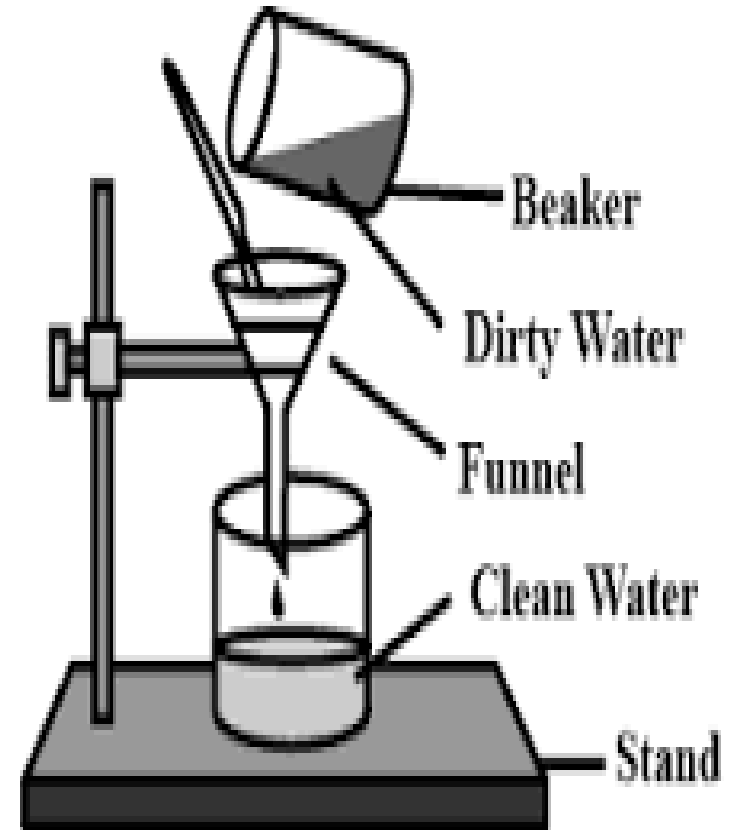


FILTRATION

- ❖ Filtration is a process by which insoluble solids can be removed from a liquid by using a filter paper.

A filter paper is a special type of paper which has pores that are tiny enough to let only liquids pass through it. If you pass a solution through filter paper, any undissolved solid particles will get left behind on the paper whereas the liquid will filter through. The liquid that passes through is called the filtrate and the undissolved solid particles are called residue.

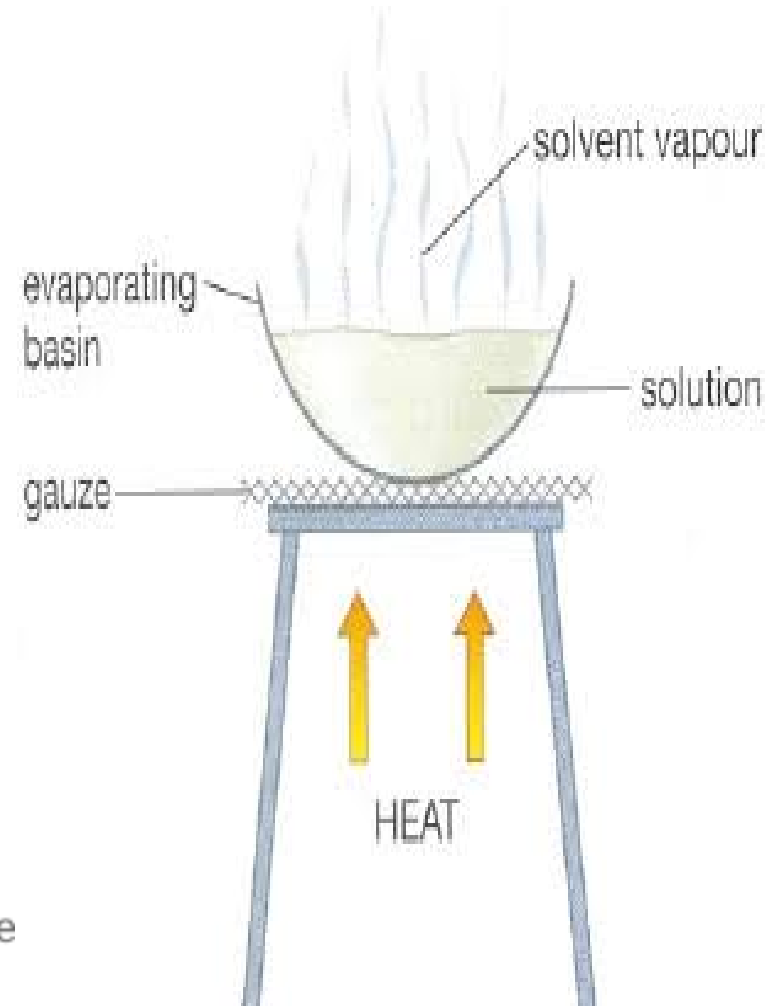
Example: A mixture of chalk powder and water can be separated by this method.



EVAPORATION

Evaporation is the process of vaporizing the solvent to obtain the solute. Evaporation is used to separate a mixture containing a non-volatile, soluble solid from its volatile, liquid solvent.

We can separate salt from a solution by evaporating the water from the solution.



HOME ASSIGNMENT

Exercise Q5 to Q11

- 1) How can we separate saw dust, sand and iron fillings?**
- 2) How can we obtain clean water from muddy water?**



THANKING YOU

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