

Chemistry Study Materials for Class 9 (NCERT Based notes of Chapter -02)

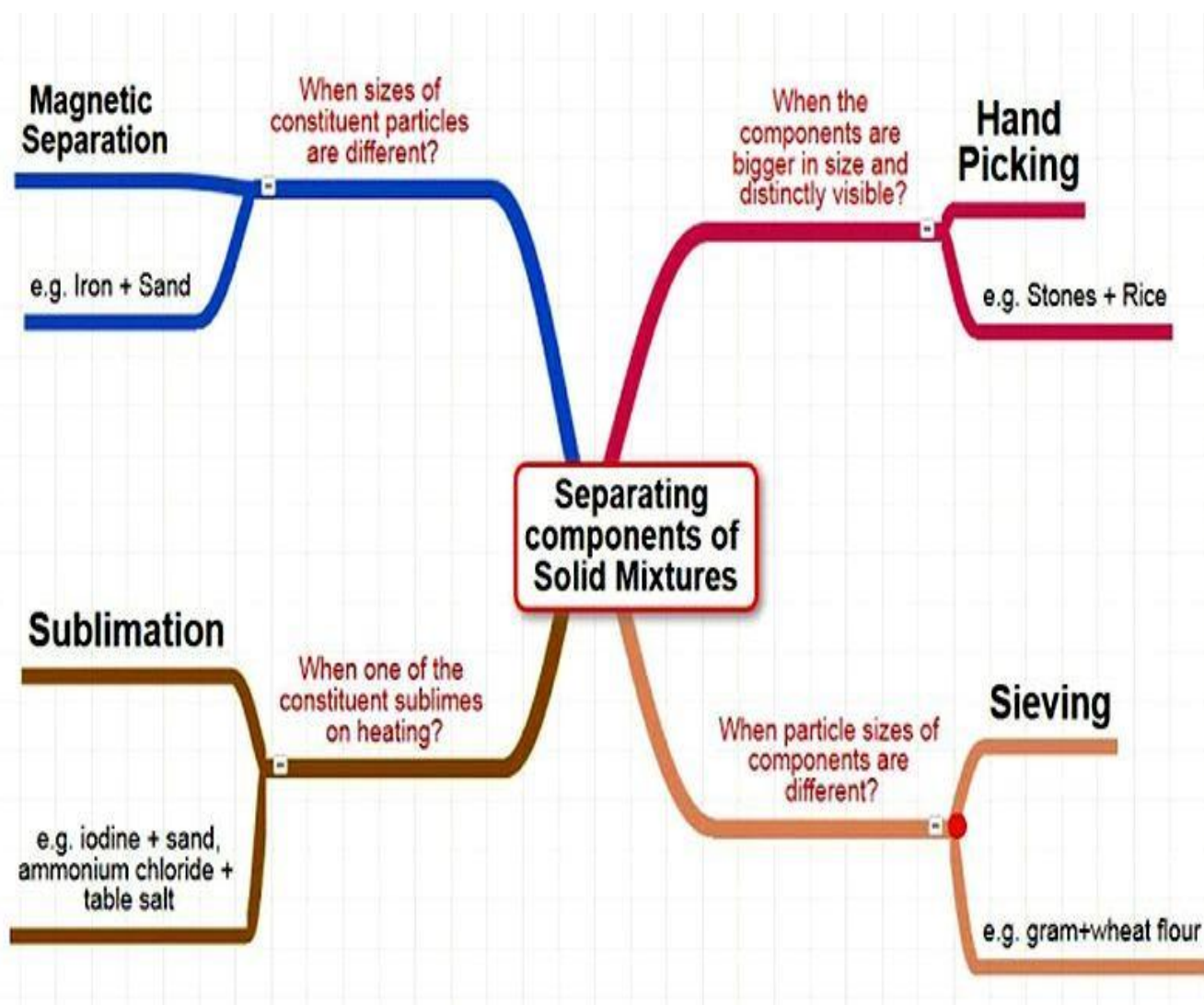
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IS MATTER AROUND US PURE

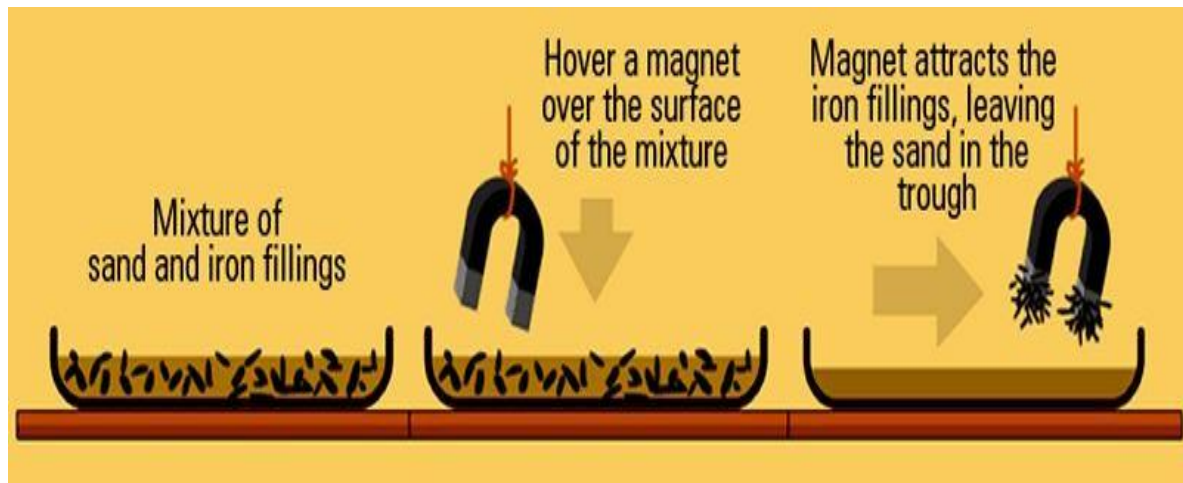
DIFFERENT WAYS TO SEPARATE SOLID MIXTURES

- Hand Picking
- Sieving
- Magnetic Separation Method
- Sublimation



MAGNETIC SEPARATION METHOD

Magnetic Separation Method is ideal for separating mixtures of two solids with one part having **magnetic** properties. Some metals like iron, nickel and cobalt have magnetic properties whiles gold, silver and aluminum do not. Magnetic elements are attracted to a magnet.



It works like this: Let us take a mixture of sand and iron filing for example.

To separate this, spread out the mixture on a flat surface. Run a magnet bar over the surface. You will notice that the magnetic elements (iron filings) will be attracted to the magnet over it. After a number of runs, all the sand will be free from any iron filing.

SIEVING METHOD

When the sizes of the components of a mixture are big enough, they can be separated with the help of sieve. A sieve is a simple mechanical device in which a mesh is attached to a frame. When the mixture is placed on the mesh and is stirred, particles of smaller size pass through the mesh while the bigger particles of the other component remain above the mesh.

E.g. gram can be separated wheat, sieving of sand at construction site etc.



HAND PICKING METHOD

It involves simply picking out substances by hand and separating them from others. The substances being separated may be impurities that have to be thrown away or it may be that both the substances being separated are useful – such as if you separate green grapes from black ones from a mixture of the two.