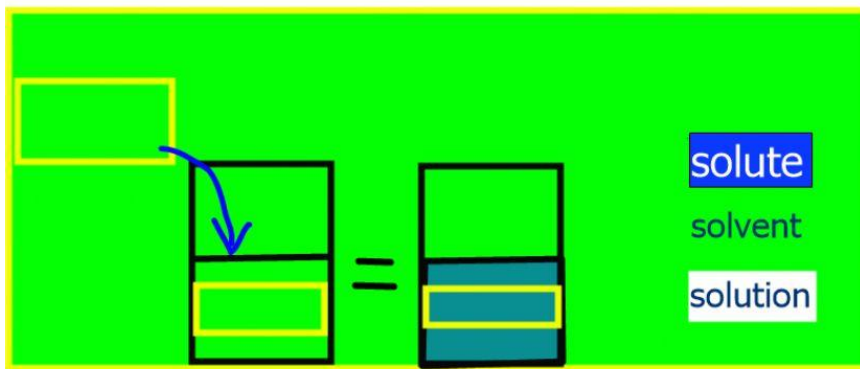


# Making Solutions.



substances dissolve in water.

(salt, sugar, soluble tablets, copper sulfate)

substances do not dissolve in water.

(sand, wood, rock, plastic)

When a substance (solute) dissolves in water (solvent) they form a .

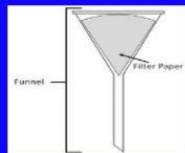
– a universal solvent because it can dissolve a lot of solutes.

**SPEEDing up dissolving**

- 1) Stirring the solution
- 2) Increase the temperature
- 3) Use smaller pieces of solution

## Separating mixtures

substances can be separated from water by filtration



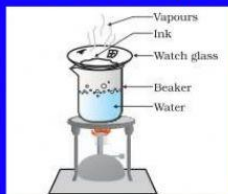
Wood, sand, tea leaves can be separated from water.

solids can be separated by sieving.



Gravel can be separated from sand, stones from flour.

substances can be separated from water by evaporation



salt from water  
paint from ink

can be used to separate metals from a mixture.



iron from sand  
nickel from salt

When a liquid evaporates from solution, the solid is left behind.

Insoluble substances can be separated from water by .

Different sized solids can be separated by using .

Soluble substances can be separated from water by .

Magnets can be used to separate  from a mixture.