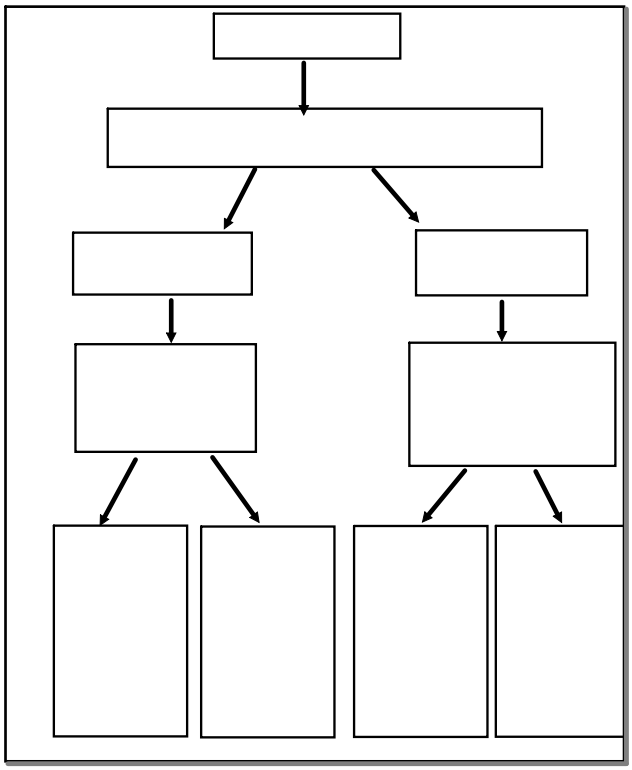
# Mixtures

Phase = different materials in a mixture

Mixture = matter that contains two or more different phases

Interfaces = boundaries that separate the phases



# Homogeneous or Heterogeneous

styrofoam in water
air
milk
floor tiles
salt dissolved in water
rock
brass
copper
sand in water

Solute = the dissolved material

Solvent = the dissolving material

## Pure substances (compounds or elements)

1) Every pure substance has exactly the same characteristic physical and chemical properties

2) Every sample of a given pure substance has exactly the same chemical composition

## Separation Techniques

1) Distillation

- a sepeartion technique based on two substances having different boiling points

Ex

2) Filtering

- used to separate a solid and a liquid

Ex.

3) Chromatography (2 types)

- Employs a system with two phases of matter
  1. mobile phase
  2. stationary phase

Types :

a) Paper Chromatography

- uses paper as the stationary phase and a liquid as the mobile phase

Ex.

b) Liquid or Gas chromatography

4) Know the physical properties of a substance

- Is it magnetic?
- does it conduct electricity?
- does it dissolve at normal temp?
- does it dissolve at a higher temp?