

Some Basic Concepts of Chemistry

Atom & molecules :-



Matter $\xrightarrow{\text{Heat}}$ molecules \rightarrow Vibration
 \searrow Atom & molecule
Vibration is the motion of particles.

Matter $\xrightarrow{\text{Cool}}$ molecule
pass - pass

Solid $\xrightarrow{\text{Heat}}$ Liquid $\xrightarrow{\text{Heat}}$ Gas

Matter

Mixture

Pure Substance

Homogeneous

Physically separable

one type of atoms
Element

Comp.

same

2+3

Heterogeneous

completely mix

completely mix
↑
sugar + lemon
partially mix

2H + 1O

Prop. of matter

Physical

Chemical

No change in
composition

mass

46 kg substance



amount



Constant

Volume \Rightarrow space

weight

force of gravity



substance

Variable \Rightarrow Change in
gravity

$$\text{density} = \frac{\text{mass}}{\text{Volume}}$$

$$3 \times 10^5 \times 5 \times 10^9$$

$$\begin{aligned} &= (3 \times 5) \times 10^{14} \\ &= 15 \times 10^{14} \end{aligned}$$



Precision [Closeness]

Height = 158 cm = 158.4

Weight = 46 kg = 46.6

Accepted = 46.643

158 158 159

158.732 cm

Accuracy [Acurate]

158.643

~~Accuracy~~

158.003

158.103

158.204

average

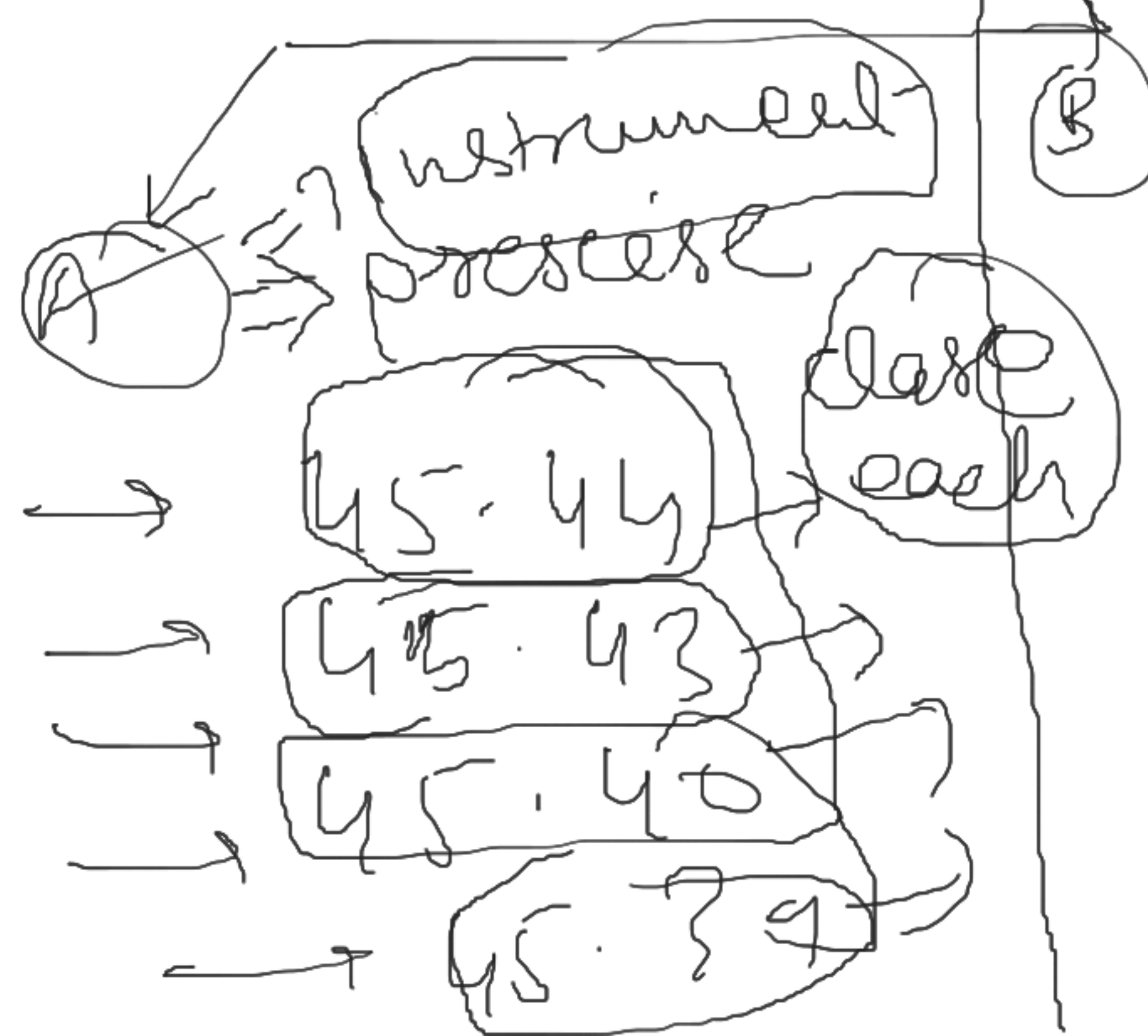
158.640

158.520

46.64

LF

neurale



46.60

46.50

46.49

46.40

46.53

values \Rightarrow ans $\left[\begin{array}{l} \text{Real} \\ \text{False} \end{array} \right]$
 \Downarrow
Accurate

values \Rightarrow classe-to each other
precise

value \Rightarrow $\left[\text{Accurate} + \text{each other} \right] \Rightarrow$ $\begin{array}{l} \text{Precise} \\ \text{Accurate} \end{array}$