## Chemistry is the study of Matter & Energy Matter anything that occupies volume

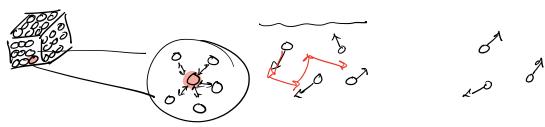
Kinetic Molecular Theory

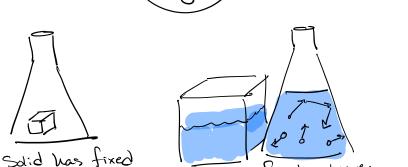
and has mass

- All matter made of Small particles (atoms)
- Allways in motion
- motion & to heat & Proportional

HOLH

Solid Heat Heat gas





dimensions fixed volume but variable

Particles occupy

Particles occupy

N 35-90%

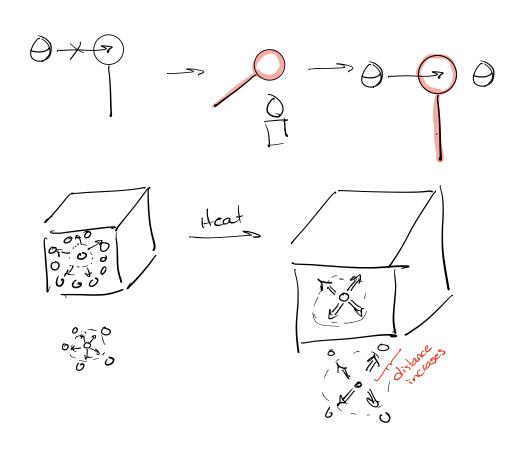
N 75-80%

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15-10% Empty Space

25-20% Empty Space

99.9% empty



mass - measure of the amount of matter in object

independent of gravity

mass = weight

Weight - A measure of force acting on a mass through gravity

	Earth	Mass	mars (	5 opiter
	F	Ţ	F	I
weight	(30 lbs	29.8165	67.8165	455165
Mass	81.6kg	81.6 kg	31.6 kg	81.6 kg

Law of Conservation of Matter

when a Chemical Change or physical Change occurs there is no Change in the amount of Matter

mass Salance

massinitial = massfiral

Classification of Matter

Pure Substances mixtures Cannot physically be Separated Can be physically Separated filtered distilled Combond Element Smallest Component of Watter Cannot be broken down into Smaller wits.