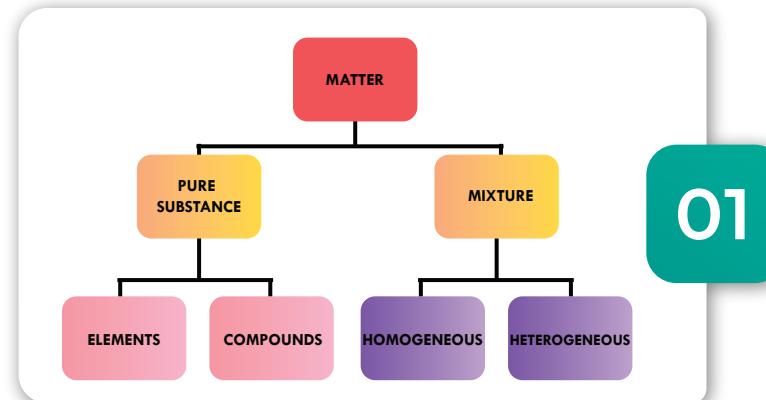
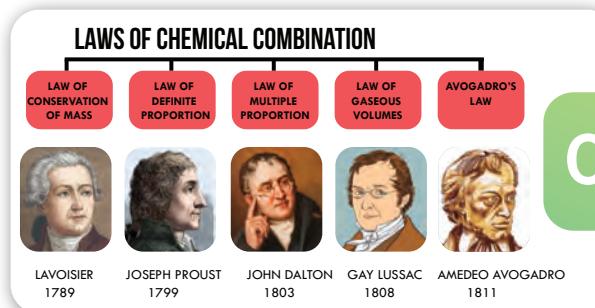


# CHEMISTRY



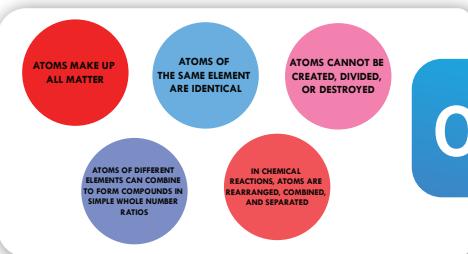
01

- Q) Which one of the following is not a mixture ?  
 (A) Tap water      (B) Distilled water  
 (C) Salt in water    (D) Oil in water



02

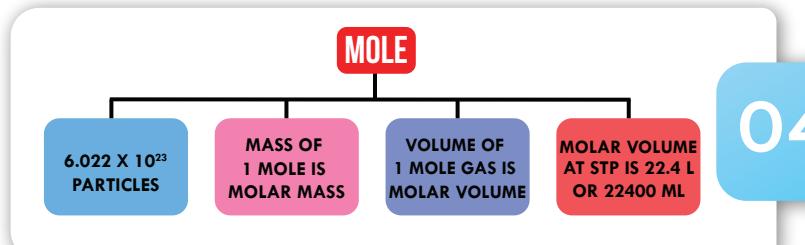
- Q) Which one of the following pairs of compound illustrate the law of multiple proportions ?  
 (A)  $\text{H}_2\text{O}$ ,  $\text{Na}_2\text{O}$     (B)  $\text{MgO}$ ,  $\text{Na}_2\text{O}$   
 (C)  $\text{Na}_2\text{O}$ ,  $\text{BaO}$     (D)  $\text{SnCl}_2$ ,  $\text{SnCl}_4$



03

## DALTON'S ATOMIC THEORY

## MOLE CONCEPT



04

- Q) Which one of the followings has maximum number of atoms ?  
 (A) 1 g of Mg(s) [Atomic mass of Mg = 24]  
 (B) 1 g of  $\text{O}_2$  [Atomic mass of O=16]  
 (C) 1 g of Li(s) [Atomic mass of Li = 7]  
 (D) 1 g of Ag(s) [Atomic mass of Ag = 108]



## NATURE OF MATTER

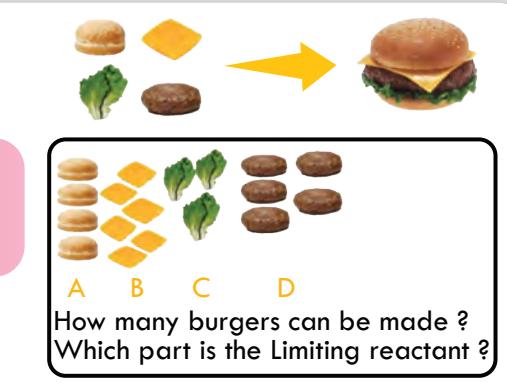
## STOICHIOMETRIC CALCULATIONS

## SOME BASIC CONCEPTS OF CHEMISTRY

07

## LIMITING REACTANT

07



- Q) The number of moles of hydrogen molecules required to produce 20 moles of ammonia through Haber's process is :  
 (A) 40    (B) 10    (C) 20    (D) 30

06

## EF & MF

ACTUAL FORMULA	SIMPLEST FORMULA
Molecular Formula	Empirical Formula
$\text{C}_3\text{H}_6\text{O}_3$	$\text{CH}_2\text{O}$
$\text{C}_{10}\text{H}_{14}\text{N}_2$	$\text{C}_5\text{H}_7\text{N}$
$\text{C}_{12}\text{H}_{22}\text{O}_{11}$	$\text{C}_{12}\text{H}_{22}\text{O}_{11}$

- Q) An organic compound contains 80% (by wt.) C & the remaining percentage of H . The empirical formula of this compound is :  
 (A)  $\text{CH}_3$     (B)  $\text{CH}_4$     (C)  $\text{CH}$     (D)  $\text{CH}_2$

05

Percentage composition of $\text{H}_2\text{O}$		Percentage composition of $\text{CO}_2$	
MASS % OF H	$\frac{2}{18} \times 100$	MASS % OF O	$\frac{16}{18} \times 100$
$\frac{2}{18} \times 100$	11.11%	$\frac{16}{18} \times 100$	55.56%

- Q) Mass % of carbon in ethanol is :  
 (A) 52    (B) 13    (C) 34    (D) 90