

Date Planned : __ / __ / __	Daily Tutorial Sheet - 1	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	Level - 1	Exact Duration : _____

- The smallest matter particle that can take part in chemical reaction is: ▶
 (A) Atom (B) Molecule (C) Both (A) and (B) (D) None of these
- The number of atoms present in a 0.635 g of Cu piece will be : ▶
 (A) 6.023×10^{-23} (B) 6.023×10^{23} (C) 6.023×10^{22} (D) 6.023×10^{21}
- The mass of 112 cm^3 of CH_4 gas at STP is : ▶
 (A) 0.16 g (B) 0.8 g (C) 0.08 g (D) 1.6 g
- Rearrange the following (I to IV) in the order of increasing masses and choose the correct answer, from (A), (B), (C) and (D) (Atomic mass of N = 14, O = 16, Cu = 63). ▶
 (I) 1 molecule of oxygen (II) 1 atom of nitrogen
 (III) 1×10^{-10} gm molecular weight of oxygen
 (IV) 1×10^{-10} gm atomic weight of copper
 (A) (II) < (I) < (III) < (IV) (B) (IV) < (III) < (II) < (I)
 (C) (II) < (III) < (I) < (IV) (D) (III) < (IV) < (I) < (II)
- Choose the wrong statement. ▶
 (A) 1 mole means 6.023×10^{23} particles
 (B) Molar mass is mass of one molecule
 (C) Molar mass is mass of one mole of substance
 (D) Molar mass is molecular mass expressed in grams
- The sample with largest number of atoms is: ▶
 (A) 1g of O_2 (g) (B) 1g of Ni(s) (C) 1g of B(s) (D) 1g of N_2 (g)
- 19.7 kg of gold was recovered from a smuggler. How many atoms of gold were recovered (Au = 197) ? ▶
 (A) 100 (B) 6.023×10^{23} (C) 6.02×10^{24} (D) 6.02×10^{25}
- How many molecules are present in 12 L of liquid CCl_4 ? The density of the liquid is 1.59 g cm^{-3} . ▶
 (A) 7.44×10^{26} (B) 0.744×10^{26} (C) 1.59×10^{26} (D) 15.9×10^{26}
- One atom of an element X weigh 6.643×10^{-23} g. Number of moles of atom in 20 kg is: ▶
 (A) 140 (B) 150 (C) 250 (D) 500
- The number of water molecules in 1L of water is : ▶
 (A) 18 (B) $N_A/2$ (C) N_A (D) $55.55 N_A$
- How many atoms are present in one mole of H_2SO_4 ? ▶
 (A) $7 \times 6.02 \times 10^{23}$ (B) $1.5 \times 6.02 \times 10^{23}$
 (C) 6.02×10^{23} (D) $2 \times 6.02 \times 10^{23}$
- The mass of one atom of hydrogen is approximately : ▶
 (A) 1g (B) 3.2×10^{-24} g (C) 1.6×10^{-24} g (D) 0.5g



- 13.** Which of the following contains greatest number of oxygen atoms?
- (A) 1g of O (B) 1g of O₂
(C) 1g of O₃ (D) All have the same number of atoms
- 14.** The maximum number of molecule is present in :
- (A) 15 L H₂ gas at STP (B) 5L of N₂ gas at STP
(C) 0.5g of H₂ gas (D) 10g of O₂ gas
- 15.** One mole of CO₂ contains
- (A) 3g atoms of CO₂ (B) 18.1×10^{23} molecules of CO₂
(C) 6.02×10^{23} atoms of O (D) 6.02×10^{23} atoms C