

Chem11 Molar Mass : W.S.-20

- 1)a) One mole = _____
- b) The name given to this number is : _____
- 2) The mass of one mole of carbon-12 atoms is exactly _____ g.
- 3) Give the molar mass in grams of the following. (mass of one mole to one decimal place)
- a) lithium atoms _____ b) magnesium atoms _____
- c) iron atoms _____ d) chlorine molecules _____
- e) oxygen atoms _____ f) oxygen molecules _____
- g) Hg atoms _____ h) argon atoms _____
- i) S atoms _____ j) S₈ molecules _____
- k) phosphorus atoms _____ l) P₄ molecules _____
- 4) Find the molar mass (mass of one mole) to one decimal place.
- a) H₂O _____ b) NH₃ _____
- c) CO₂ _____ d) C₆H₁₂O₆ _____
- 5) a) Find the mass of one mole of silver atoms. _____
- b) Find the mass of one silver atom. _____

Answers : 1a) 6.02×10^{23} , b) Avogadro's Number, 2) 12 grams, 3)a) 6.9 g, b) 24.3 g, c) 55.8 g, d) 70.9 g, e) 16.0 g, f) 32.0 g, g) 200.6 g, h) 39.9 g, i) 32.1 g, j) 256.5 g, k) 31.0 g, l) 123.9 g, 4)a) 18.0 g, b) 17.0 g, c) 44.0 g, d) 180.0 g, 5)a) 107.9 g, b) 1.79×10^{-22} g.