Molar Calculations Quiz

- 1. How many moles are in 5.12 x 10²² molecules of Sulfur Hexafluoride?
 - A. 3.08×10^{46} moles
 - B. 0.085 moles
 - C. 0.1 moles
 - D. 3.1 x 10⁴⁶ moles
- 2. How many Lithium ions are in 3.11 moles of Lithium Carbonate, Li₂CO₃?
 - A. 1.87×10^{24} ions
 - B. 3.74 x 10²⁴ ions
 - C. 5.62×10^{24} ions
 - D. 1.54 x 10⁻²³ ions
- 3. What is the percent composition by mass of the elements in Calcium Chloride?
 - A. 36.1% Ca, 63.9% Cl
 - B. 36.1% Cl, 63.9% Ca
 - C. 53.1% Ca, 46.9% Cl
 - D. 53.1% Cl, 46.9% Ca
- ^{4.} What is the empirical formula of a compound containing 39.9% C, 6.7% H, and 53.4% O?
 - $A. C_3H_6O_3$
 - B. C₂HO
 - $C. C_{10}H_{20}O_{10}$
 - D. CH₂O
- 5. What is the empirical formula of a compound containing 65.2% Sc, 34.8% O?
 - $A. Sc_3O_2$
 - B. Sc_2O_3
 - C. ScO₂
 - $D.Sc_2O$