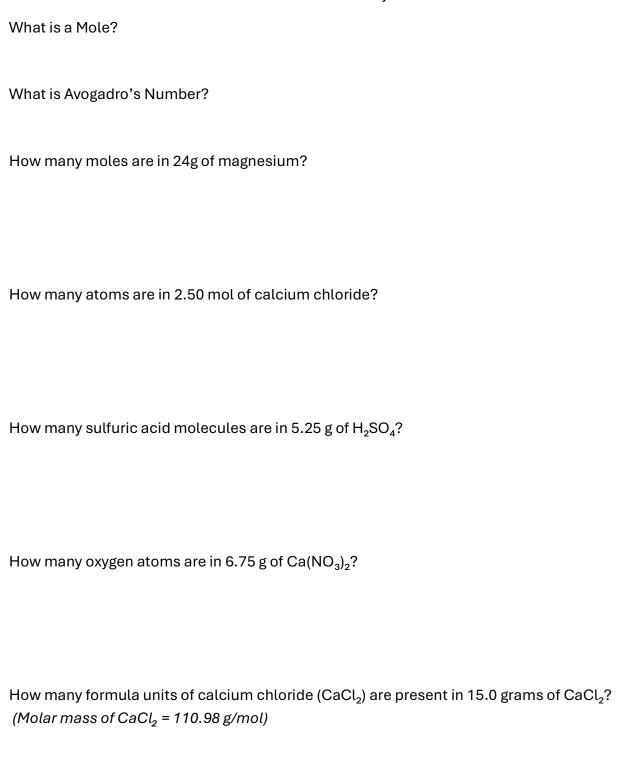
CH.3 Stoichiometry



Silver and nitric acid react according to the following balanced equation:					
$3 \text{ Ag(s)} + 4 \text{ HNO3(aq)} \rightarrow 3 \text{ AgNO3(aq)} + 2 \text{ H2O(l)} + \text{NO(g)}$					
A. How many moles of silver are needed to react with 40 moles of nitric acid?					
B. From the amount of nitric acid given in Part A, how many moles of silver nitrate will be produced?					
C. From the amount of nitric acid given in Part A, how many moles of water will be produced?					
D. From the amount of nitric acid given in Part A, how many moles of nitrogen monoxide will be made?					
What is an Empirical Formula?					
List 3 steps to determine an empirical formula from the percent composition 1.)					
2.)					

3.)
Determine the empirical formula of a compound that is 52.14% carbon, 13.13% hydrogen, and 34.73% oxygen.
What's the empirical formula of a compound that contains 49.4% K, 20.3% S, and 30.3% O by mass?
A compound has an empirical formula of CH and a molar mass of 78 g/mol. What is its molecular formula?
Define a limiting reactant:
What is the limiting reactant when 5.00 moles of nitrogen gas (N_2) react with 12.00 moles of hydrogen gas (H_2) to form ammonia (NH_3)?
Write the Percent Yield formula:
During the synthesis of aspirin, the theoretical yield is calculated to be 15.8 grams. If the actual amount of aspirin obtained is 12.3 grams, what is the percent yield of the reaction?