

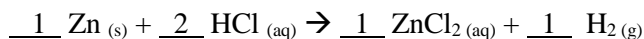
**Unit 4-Section V – Lesson 24: HW#21- Mole Ratios****Review**

Chemical equations provide us with the following information

- The identity of the reactants and products
- The states of the reactants and products
- The number of atoms is involved in the reaction

Mole ratio relates the proportion of moles of any 2 reactants or products

Consider the following reaction



1. What type of reaction is this?
  - a. Synthesis/Combination
  - b. Decomposition
  - c. Double Replacement
  - d. Single Replacement
  - e. Combustion
2. What do you expect to observe in this reaction?
  
3. What is the mole ratio of HCl : H<sub>2</sub>? \_\_\_\_\_
4. What is the mole ratio of the reactants? \_\_\_\_\_
5. Suppose you have 10 moles of solid Zn, how many moles of H<sub>2</sub> you could make?

6. Suppose you have 50g of HCl, how many grams of ZnCl<sub>2</sub> you could make?

*Step 1: How many moles of HCl are there in 50 grams of HCl?*

*Step 2: Using the number of moles HCl, how many moles of ZnCl<sub>2</sub> you could produce?*

*Step 3: Using the number of moles of ZnCl<sub>2</sub> that you could produce, what is the mass of ZnCl<sub>2</sub>?*