

## Chapters 6 & 7: SI Session for Chem 1407

### Chapter 6:

1. Define and provide an example for the following terminology:

Term	Definition	example
Mole		
Molar Mass		
Mass Percent Composition		
Empirical Formulas		
Molecular Formulas:		

2. Determine the percent mass composition of Hydrogen in the compound  $\text{H}_3\text{PO}_4$ .

3. How many grams of S are in 3 moles of  $\text{SO}_4$ ?

4. What are the rules used to calculate Empirical formulas?

a.

b.

c.

d.

5. Determine the empirical formula for a compound with 40% C, 20% H, and 20% N.

6. Determine the molecular formula for H<sub>3</sub>O<sub>2</sub>.

#### Chapter 7:

1. What are the five indicators of a chemical reaction?

- a.
- b.
- c.
- d.
- e.

2. Label the reactant and products in the following chemical equation.



3. What is a catalyst?

4. In an electrolyte solution, what do ionic compounds separate into?

a.