

# Chemical Reactions Test

1. Convert 10.2g Cu  $\rightarrow$  atoms

$$10.2 \text{ g Cu} \times \frac{1 \text{ mole}}{63.5 \text{ g}} \times \frac{6.02 \times 10^{23} \text{ atoms}}{1 \text{ mole}} =$$

2. 500g  $\text{Mg}(\text{OH})_2 \rightarrow$  moles

$$500 \text{ g Mg}(\text{OH})_2 \times \frac{1 \text{ mole}}{58.3 \text{ g}} =$$

3.  $\frac{34.0 \text{ g}}{58.3 \text{ g}} \times 100 =$

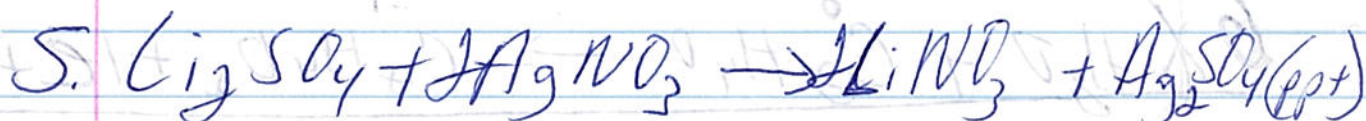
4. 80.0% C    20.0% H    MW = 30.0g

$$\text{C } 80.0 \text{ g C} \times \frac{1 \text{ mole}}{12.01 \text{ g}} = 6.66 \text{ mole} \quad 20.0 \text{ g H} \times \frac{1 \text{ mole}}{1.01 \text{ g H}} = 19.80$$

$$\text{C} = \frac{6.66 \text{ mole}}{6.66 \text{ mole}} = 1 \quad \text{H} = \frac{19.80 \text{ mole}}{6.66 \text{ mole}} = 2.97$$

$$\text{C H}_3 = \text{Emp. Form.} \quad \frac{30}{15} = 2$$

$$\text{C H}_3 \times 2 \quad \text{C}_2 \text{ H}_6 = \text{Molec. Form}$$



$\rightarrow$

