**Q2 Post Test Concept Review**

**Learning Targets - Unit 5: Equations & Driving Forces**

1. Identify the five types of reactions (synthesis, decomposition, single and double displacement, combustion)
2. Predict the most probable products of a chemical reaction
3. Display understanding to Law of Conservation of Mass
4. Reconstruct a description of a chemical change in the form of a balanced chemical equation
5. Explain cause of conductivity and draw conclusions from conductivity data
6. Use solubility rules to predict phase of products in a reaction
7. Describe and use acid/base indicators (i.e. ppt and litmus paper)
8. Write ionic and net ionic equations from molecular equations.
9. Apply cumulative knowledge of these concepts to the identification of unknown solutions.
10. Identify strong vs. weak Electrolytes

**Learning Targets - Unit 6: Factor Labeling and Moles**

1. Convert simple and derived units using factor label/dimensional analysis.

2. Display understanding of the origin and use of atomic mass units.

3. Use the periodic table to determine atomic mass; determine formula mass (amu) and molar
 mass.

4. Calculate percent composition.

5. Compare and contrast the mole with other counting units.

6. Perform calculations converting between moles, mass, and Avogadro’s number.

7. Solve empirical formula problems from percent or mass.

8. Determine empirical formula in a lab setting.

9. Calculate molecular formula from empirical formula.

**Learning Targets - Unit 7: Stoichiometry**

1. In a chemical process, recognize that there is an ideal ratio of reactants.
2. Apply ideal ratio concept to reaction coefficients in a balanced equation.
3. Solve stoichiometric problems involving moles and mass.
4. Identify limiting reactant to determine the quantity of product (s) formed.
5. Calculate percent yield based on lab data obtained.