AP CHEMISTRY

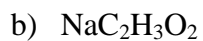## TOPIC 1: CHEMICAL FOUNDATIONS, PART E, EXAMPLES

Day 6:

- Percent Composition
- Empirical formulas
- Molecular formulas

1) Calculate the percent composition by mass of the following compounds:

   a) $MgSO_4$

   b) $NaC_2H_3O_2$

2) Calculate the empirical formula for a compound containing 71.47% calcium and 28.53% oxygen.

3) Calculate the empirical formula for a sample that contains 251.850 g carbon, 14.09 g of hydrogen, and 149.12 g oxygen (in that order).

4)   Determine the molecular formula for the sample of SNH with a molecular mass of 188.35 grams / mole.

5)   Determine the molecular formula for a sample that contains 12.09 g nitrogen, 26.73 g phosphorus, and 61.18 g of chlorine where the molecular mass is 347.64 grams / mole