Name: _____

PERCENT COMPOSITION:

1. Determine the percent composition for each of the elements in magnesium nitrate.

2. Determine the percent composition for each of the elements in nickel (II) iodide.

3. Find the percent composition of each of the elements in acetic acid, the compound that gives vinegar its taste.

EMPIRICAL FORMULAS (E.F.):

4. Quantitative analysis shows that a compound contains 32.4% Na, 22.6% S and 45.0% O. Find the empirical formula of this compound.

5. Determine the empirical formula of propane gas, a gas most commonly used in gas grills, if it contains 81.8% C and 18.2% H.

6. Determine the empirical formula of rust, a common effect of a chemical reaction in which a metal is left exposed to air over a period of time, if it contains 69.9% Fe and 30.1% O.

7. Determine the empirical formula of a compound containing 24.7% potassium, 34.8% manganese, and 40.5% oxygen.

E.F. of HYDRATES:

8. What is the hydrate formula that is 90.7% strontium oxalate (SrC₂O₄) and 9.30% H₂O? (*Hint: Solve like a regular empirical formula*)