

Name: _____ Period: ____ Date: _____

Test Review: Nomenclature, % Composition, & Mole Conversions

Naming/ Formula Writing Practice

1. Name the following compounds:

- _____ a. NH_4OH
- _____ b. K_2SO_3
- _____ c. NaI
- _____ d. Fe_2O_3
- _____ e. PCl_3

HINT: Make sure you can name binary ionic compounds, ternary ionic compounds, covalent compounds and acids. Also make sure that you can write a compound formula from the ions and determine what ions criss-crossed to make up the formula. Also, when or why would you need Roman Numerals?

2. Write correct chemical formulas for each of the following:

- _____ a. calcium sulfate
- _____ b. hexacarbon hexahydride
- _____ c. lead(II) chloride
- _____ d. zinc chloride
- _____ e. ammonium phosphate
- _____ f. copper (I) sulfide

Hint: If it is ionic (M=NM) look up the charges on the PT or the Polyatomic Ion Chart and criss-cross. Reduce if necessary, and make sure you use parenthesis on polyatomic ions if you criss-crossed a number larger than 1.

Molar Mass/GFM Practice

3. Find the molar mass or GFM of each of the following:

_____ a. magnesium nitrate (*Hint: Write the formula first*)

_____ b. $C_{12}H_{22}O_{11}$

_____ c. iron(III) sulfate (*Hint: Write the formula first*)

Percentage Composition Practice

4. Find the percentage composition of $Mg(OH)_2$:

_____ % Mg _____ % O _____ % H

5. The name of the compound in the previous problem is:

6. Find the percentage composition of CF_6

_____ %C _____ %F

7. The name of the compound in the previous problem is :

8. Find the percentage composition of $CuCl_2$:

_____ % Cu _____ % Cl

9. The name of the compound in the previous problem is :

Mole Conversion Practice

10. How many moles are represented by each of the following:

a. 12.0 g H_2O

b. 305 g NaOH

11. How many formula particles are represented in questions 10a and 10b above?