

Name _____ Period _____ Date _____

CHEMISTRY PRACTICE PROBLEMS

Rules:

1. Positive ion is first...it is usually a single element except NH_4^+ (ammonium)
2. Negative ion is second. If it is a single element, the ending is change to *-ide*
3. Negative polyatomic atomic ions end in *-ate* or *-ite*
(You need to check the ions list in text to determine charge and ending)
4. Compound is electrically neutral: positive and negative charges must be balanced!

1. Name the following compounds:

- | | |
|---------------|-----------------------------------|
| a. NaCl _____ | g. NaOH _____ |
| b. LiBr _____ | h. NaNO_3 _____ |
| c. MgO _____ | i. AlPO_4 _____ |
| d. NaF _____ | j. NH_4NO_3 _____ |
| e. LiCl _____ | k. BeO _____ |
| f. CaS _____ | l. NaCN _____ |

2. Write the formula for the following compounds:

- a. sodium bromide _____
- b. potassium fluoride _____
- c. sodium cyanide _____
- d. lithium chloride _____
- e. beryllium oxide _____
- f. magnesium oxide _____
- g. barium oxide _____
- h. sodium fluoride _____
- i. aluminum chloride _____
- j. zinc oxide _____
- k. zinc sulfide _____
- l. aluminum nitride _____
- m. aluminum phosphide _____



3. Name the following Compounds

- | | |
|-----------------------------------|---|
| a. CaCO_3 _____ | j. AgNO_3 _____ |
| b. Na_2SO_4 _____ | k. CaCrO_4 _____ |
| c. KOH _____ | l. ZnCr_2O_7 _____ |
| d. MgS _____ | m. KMnO_4 _____ |
| e. MgO _____ | n. KClO_3 _____ |
| f. Ba(OH)_2 _____ | o. K_3PO_4 _____ |
| g. AlPO_4 _____ | p. K_2SO_4 _____ |
| h. $\text{Ba(NO}_3)_2$ _____ | q. Na_2CO_3 _____ |
| i. $\text{Mg(NO}_3)_2$ _____ | r. $\text{Na}_2\text{Cr}_2\text{O}_7$ _____ |

4. Write formulas for the following covalent compounds

- a. carbon dioxide _____
- b. water _____
- c. carbon monoxide _____
- d. hydrogen selenide _____
- e. carbon disulfide _____
- f. carbon tetrachloride _____
- g. sulfur hexafluoride _____
- h. diphosphorus pent oxide _____



5. Write the formulas for the following acids (find the formulas in Chapter 6!)

- a. hydrochloric acid _____
- b. nitric acid _____
- c. acetic acid _____
- d. sulfuric acid _____
- e. carbonic acid _____
- f. phosphoric acid _____