Name: _____
Hour: ____ Date: _____

Chemistry: *Ionic Compounds: Polyatomic Ions*

Write the name of each of the following compounds.

1. NH_4Cl 1. _____
2. $HClO_2$ 2. _____
3. $Ca(BrO_3)_2$ 3. _____
4. $BeSO_4$ 4. _____
5. $(NH_4)_3N$ 5. _____
6. NH_4NO_3 6. _____
7. $Sr_3(PO_4)_2$ 7. _____
8. $Zn(ClO_3)_2$ 8. _____
9. $AgIO_3$ 9. _____
10. $K_2Cr_2O_7$ 10. _____

Write the chemical formula for each of the given names.

11. sodium chromate 11. _____
12. barium nitrate 12. _____
13. ammonium sulfate 13. _____
14. aluminum hydroxide 14. _____
15. calcium phosphate 15. _____
16. cesium cyanide 16. _____
17. sodium nitrite 17. _____
18. calcium acetate 18. _____
19. beryllium chlorite 19. _____
20. rubidium sulfite 20. _____

Name: _____
Hour: ____ Date: _____

Chemistry: *Ionic Compounds: Polyatomic Ions with Multiplie-Charge Cations*

Write the name of each of the following compounds.

1. $V(ClO_3)_5$ 1. _____
2. $Re(SO_4)_3$ 2. _____
3. $Os(IO_3)_3$ 3. _____
4. $Ir_3(PO_4)_4$ 4. _____
5. $Pd(SO_3)_2$ 5. _____
6. $AuNO_3$ 6. _____
7. $FePO_3$ 7. _____
8. $Ni(BrO_3)_2$ 8. _____
9. $Pb(CN)_4$ 9. _____
10. $Mn_2(Cr_2O_7)_7$ 10. _____

Write the chemical formula for each of the given names.

11. copper (II) hydroxide 11. _____
12. rhenium (VI) nitrate 12. _____
13. niobium (III) sulfate 13. _____
14. platinum (IV) iodate 14. _____
15. molybdenum (III) phosphate 15. _____
16. titanium (II) cyanide 16. _____
17. gold (I) thiosulfate 17. _____
18. iron (III) acetate 18. _____
19. cobalt (II) chlorite 19. _____
20. tin (IV) sulfite 20. _____

Compound Names and Formulas

For the list on the left, name the compound. For the list on the right, give the chemical formula that corresponds to the name

	Name		Formula
1)	NaF	13)	potassium fluoride
2)	K_2CO_3	14)	ammonium sulfate
3)	$MgCl_2$	15)	magnesium iodide
4)	$Be(OH)_2$	16)	copper (II) sulfite
5)	SrS	17)	aluminum phosphate
6)	Cu_2S	18)	lead (II) nitrite
7)	ZnI_2	19)	cobalt (II) selenide
8)	$Ca_3(PO_4)_2$	20)	silver cyanide
9)	NH_4I	21)	copper (II) bicarbonate
10)	$Mn(NO_3)_3$	22)	iron (II) oxide
11)	$FePO_4$	23)	lithium cyanide
12)	$CoCO_3$	24)	lead (IV) sulfite

Review– Naming Chemical Compounds

The following are a good mix of naming and formula writing problems to help you get some practice. I will expect that you know how to name both ionic and covalent compounds in your work.

Name the following chemical compounds:

1) $NaBr$ _____

2) $Ca(C_2H_3O_2)_2$ _____

3) P_2O_5 _____

4) $Ti(SO_4)_2$ _____

5) $FePO_4$ _____

6) K_3N _____

7) SO_2 _____

8) $CuOH$ _____

9) $Zn(NO_2)_2$ _____

10) V_2S_3 _____

Write the formulas for the following chemical compounds:

11) silicon dioxide _____

12) nickel (III) sulfide _____

13) manganese (II) phosphate _____

14) silver acetate _____

15) diboron tetrabromide _____

16) magnesium sulfate _____

17) potassium carbonate _____

18) ammonium oxide _____

19) tin (IV) selenide _____

20) carbon tetrachloride _____

Chemis-tree Assignment:

Due December 22 or 23rd (depending on which day you have class.)

1. Pick a chemist or invention or discovery (chemistry related)
2. Research. Yes, you will need to cite your works (MLA or APA)
3. Make an ornament symbolic of your topic
4. Write 2-4 paragraphs on your topic including
    a. Why it was important (what you learned)
    b. How your ornament expresses such
    c. Why you chose that topic

Rubric: (out of 20)

Grade	Neatness	Information	Creativity	Effort
5	Pristine, Typed	Accurate, clear Thorough understanding of topic, its significance, and its relation to the course. Chem Related, works cited	Thought provoking. Original	4 well written ¶
4	Nice, but better with effort	Missing a couple details, but comprehensive and clear. Shows detailed understanding of topic. Chem related, works cited	Colorful, detailed	3 well written or 4 clear Paragraphs
3	Not too shabby.	Chem related, but missing info, shows a basic understanding of topic and significance. Works cited	Standard. Logical	3 understandable ¶
2	Thrown together	Science related, but not quite accurate or thorough, works mentioned. Shows basic understanding of topic and significance.	Not recognizable as it relates to topic	2 understandable ¶
1	messy	Science related, but not totally comprehendible. Does show at least some understanding of topic researched	Messy, thrown together. Not relevant	1 understandable ¶

☆ can check answers once finished.

Compound Names and Formulas

For the list on the left, name the compound. For the list on the right, give the chemical formula that corresponds to the name

	Name		Formula
1)	NaF	13)	potassium fluoride
2)	K_2CO_3	14)	ammonium sulfate
3)	$MgCl_2$	15)	magnesium iodide
4)	$Be(OH)_2$	16)	copper (II) sulfite
5)	SrS	17)	aluminum phosphate
☆ 6)	Cu_2S	18)	lead (II) nitrite
7)	ZnI_2	19)	cobalt (II) selenide
8)	$Ca_3(PO_4)_2$	20)	silver cyanide
9)	NH_4I	21)	copper (II) bicarbonate
☆ 10)	$Mn(NO_3)_3$	22)	iron (II) oxide
☆ 11)	$FePO_4$	23)	lithium cyanide
☆ 12)	$CoCO_3$	24)	lead (IV) sulfite

☆ = Transition Metal - use Roman Numerals