Name _____ Honors Chemistry ___/___/___

Chapter 4 Vocabulary - Define each of the following on a separate sheet of paper. All definitions must be hand written.

1. anion
2. binary compound
3. bond energy
4. cation
5. chemical formula
6. crystal lattice
7. formula unit
8. ionic bond
9. ionic compound
10. lattice energy
11. molecular compound
12. molecule
13. monoatomic ion
14. oxidation number
15. polyatomic ion
16. salt
17. ternary compound
18. unit cell

At the completion of this assignment you will be prepared to take the following Chapter 4 on-line quizzes:

- chapter 4 vocab matching quiz 1
- chapter 4 vocab matching quiz 2

The chart below lists the polyatomic ions we will use this year. It is also listed on the back of your periodic table. Polyatomic ions are groups of two or more atoms with an overall ionic charge. The polyatomic ions that are highlighted **MUST** be memorized.

Homework: You must make flash cards for each of the highlighted ions in the chart below. On one side write the formula and on the other write the name. Then, study!!!

•SYMBOLS OF COMMON POLYATOMIC IONS•					
$(AsO_3)^{3-}$	arsenite	$(C_2O_4)^{2-}$	oxalate	$(N_3)^{1-}$	azide
$(AsO_4)^{3-}$	arsenate	$(CrO_4)^{2-}$	chromate	$(NH_2)^{1-}$	amide
$(BO_3)^{3-}$	borate	$(Cr_2O_7)^{2-}$	dichromate	$(NH_4)^{1+}$	AMMONIUM
$(B_4O_7)^{2-}$	tetraborate	$(HCO_3)^{1-}$	bicarbonate	$(NO_2)^{1-}$	nitrite
$(BrO)^{1-}$	hypobromite	$(HC_2O_4)^{1-}$	bioxalate	$(NO_3)^{1-}$	nitrate
$(BrO_3)^{1-}$	bromate	$(H_3O)^{1+}$	HYDRONIUM	$(O_2)^{2-}$	peroxide
$(CHO_2)^{1-}$	formate	$(HPO_4)^{2-}$	biphosphate	$(OH)^{1-}$	hydroxide
$(C_2H_3O_2)^{1-}$	acetate	$(H_2PO_4)^{1-}$	dihydrogen phosphate	$(PO_3)^{3-}$	phosphite
$(C_4H_4O_6)^{1-}$	tartrate	$(HS)^{1-}$	bisulfide	$(PO_4)^{3-}$	phosphate
$(C_6H_5O_7)^{3-}$	citrate	$(HSO_3)^{1-}$	bisulfite	$(SCN)^{1-}$	thiocyanate
$(ClO)^{1-}$	hypochlorite	$(HSO_4)^{1-}$	bisulfate	$(SO_3)^{2-}$	sulfite
$(ClO_2)^{1-}$	chlorite	$(IO)^{1-}$	hypoiodite	$(SO_4)^{2-}$	sulfate
$(ClO_3)^{1-}$	chlorate	$(IO_2)^{1-}$	iodite	$(S_2O_3)^{2-}$	thiosulfate
$(ClO_4)^{1-}$	perchlorate	$(IO_3)^{1-}$	iodate	$(SeO_4)^{2-}$	selenate
$(CN)^{1-}$	cyanide	$(IO_4)^{1-}$	periodate	$(SiF_6)^{2-}$	hexafluorosilicate
$(CO_3)^{2-}$	carbonate	$(MnO_4)^{1-}$	permanganate	$(SiO_3)^{2-}$	silicate
The word hydrogen can be substituted for the prefix bi-. (i.e. hydrogen sulfide = bisulfide)					

At the completion of this assignment you will be prepared to take the following Chapter 4 on-line quizzes:

- polyatomic ion formula quiz 1
- polyatomic ion formula quiz 2
- polyatomic ion names quiz 1
- polyatomic ion names quiz 2