CHEMISTRY ION PRACTICE

ION DIRECTIONS

a) Use a periodic table. Write the *symbol and charge* of the ions that the following elements can form. If no ion forms, write none. * = more than one ion forms
b) Describe how many *electrons* are *gained* or *lost*.
c) Write *cation*, *anion*, or *neither*, depending on which would form.
d) Write the *name* of the ion formed. If no ion forms, write none.

	SYMBOL & CHARGE	# e- GAINED OR LOST	CATION, ANION, OR NEITHER?	ION NAME
E1) Cs	Cs^+	lost 1	cation	cesium
E2) Cl	Cl^-	gained 1	anion	chloride

1) Li
2) Sn *
3) Al
4) Na
5) N
6) K
7) Rb
8) Mg
9) P
10) Ca
11) Mn *
12) Co *
13) O
14) I
15) Fe *
16) Ba
17) Cr *
18) Zn
19) F
20) Ag
21) S
22) Cd
23) Ni
24) Cu *
25) Pb *
26) Br
27) Sr

FORMULA ANALYSIS

Identify the *numbers* and *types* of atoms in the following compounds.

EXAMPLES:	HNO_3	hydrogen 1, nitrogen 1, oxygen 3
	$Ba_3(PO_3)_2$	barium 3, phosphorus 2, oxygen 6

28) $C_{12}H_{22}O_{11}$
29) $(NH_4)_3P$
30) $Ca(NO_3)_2$
31) Na_2S
32) $CuC_2H_3O_2$

IONIC VERSUS MOLECULAR COMPOUNDS

Write *ionic* if the pair would form an ionic compound made of formula units.
Write *molecular* if the pair would form a molecular compound made of molecules.

33) Na & I
34) C & Cl
35) Mn & S
36) Al & N
37) S & F

SHORT ANSWERS

38) Write the symbols and names of the diatomic molecules.
39) Write the symbols and names of the metalloids.
40) Which group on the periodic table does not form ions?