

**CHEMISTRY 123-01**

Exercise #1

August 31, 2007

1. In each pair, indicate the ionic and molecular compound:

$\text{BF}_3$	$\text{CaF}_2$
$\text{BaSO}_4$	$\text{H}_2\text{SO}_4$
$\text{K}_2\text{O}$	$\text{N}_2\text{O}$
$\text{ICl}$	$\text{RbCl}$
$\text{CS}_2$	$\text{Li}_2\text{S}$
$\text{Na}_2\text{Cr}_2\text{O}_7$	$\text{Cl}_2\text{O}_7$
$\text{PBr}_3$	$\text{AlBr}_3$

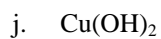
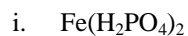
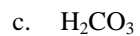
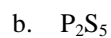
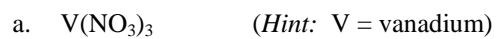
2. Circle the incorrect names:

- Magnesium(II) cation
- Iron(II) cation
- Sodium sulfate
- Aluminum trichloride
- Nitric acid

3. Write the correct formulas for the following compounds:

- Potassium perchlorate
- Nitrous acid
- Dinitrogen pentoxide
- Calcium carbonate
- Cesium oxide (*Hint: Cesium = Cs*)
- Phosphoric acid
- Silicon tetraiodide
- Nickel(II) sulfide (*Hint: Nickel = Ni*)
- Copper (I) sulfite

4. Write the correct name for each of the following compounds:



5. Give correct names for the following monoatomic ions:

a. Has 8 protons, and 10 electrons

b. Has 26 protons and 23 electrons

c. Has 17 protons and 18 electrons

d. Has 18 electrons and a charge of -2

e. Has 18 electrons and a charge of +1