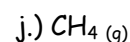
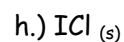
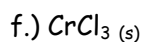
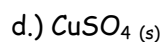
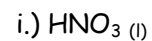
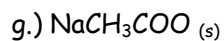
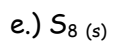
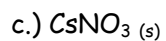


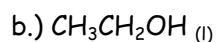
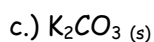
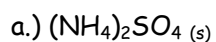
## Solutions Part 2

Name - \_\_\_\_\_

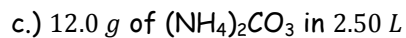
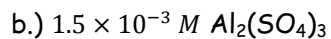
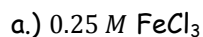
1.) State whether each of the following substances is expected to form an ionic or molecular (covalent) solution.



2.) Write equations to show the dissolving of the following substances in water.



3.) Calculate the concentrations of all the ions in each of the following solutions.



e.) 2.50 g of KBr in 150 mL of aqueous solution

4a.) Write an equation showing the equilibrium in a saturated solution of lead (II) bromide.

b.) The solubility of  $\text{PbBr}_2$  is  $0.844 \frac{\text{g}}{100 \text{ mL}}$ . What is its molarity?

c.) Calculate the concentrations of  $\text{Pb}^{2+}_{(\text{aq})}$  and  $\text{Br}^{-}_{(\text{aq})}$  in a saturated solution of  $\text{PbBr}_2$ ?

5.) Calculate the concentration of all the ions present when

a.) 25.0 mL of water is added to 20.0 mL of 0.35 M  $\text{Fe}^{3+}$ .

b.) 15.0 mL of  $6.5 \times 10^{-5} \text{ M Cu}^{2+}$  is mixed with 40.0 mL of  $3.2 \times 10^{-3} \text{ M Cl}^{-}$

c.) 95.0 mL of  $8.65 \times 10^{-4} \text{ M Al}(\text{NO}_3)_3$  is mixed with 15.0 mL of  $7.50 \times 10^{-6} \text{ M Ag}_2\text{SO}_4$ .

d.) 25.0 mL of 0.360 M  $\text{NH}_4\text{Br}$  is mixed with 75.0 mL of 0.160 M  $(\text{NH}_4)_2\text{SO}_4$ .