1. Predict products for the following reactions. Include phase subscripts, and balance each reaction that occurs.
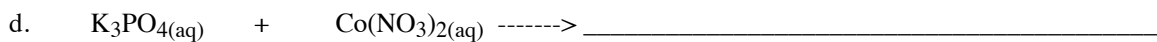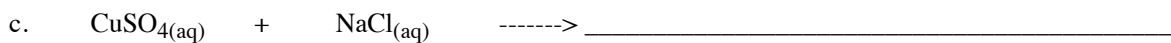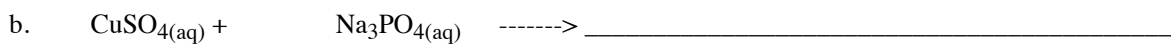
a. $Na_2CO_{3(aq)}$ + $FeCl_{3(aq)}$ ------> _____

b. $CuSO_{4(aq)}$ + $Na_3PO_{4(aq)}$ ------> _____

c. $CuSO_{4(aq)}$ + $NaCl_{(aq)}$ ------> _____

d. $K_3PO_{4(aq)}$ + $Co(NO_3)_{2(aq)}$ ------> _____

2. Predict the products of each of the following reactions.   (3 of these will be N.R.)
Include **subscripts** for $_{(aq)}$ and $_{(s)}$, and **balance** the reactions with a star (*) next to them.

* a. $KI_{(aq)}$ + $Pb(NO_3)_{2(aq)}$ ------>_____

b. $NaCl_{(aq)}$ + $Cu(NO_3)_{2(aq)}$ ------> _____

* c. $K_3PO_{4(aq)}$ + $CuSO_{4(aq)}$ ------> _____

d. $Ag_2SO_{4(aq)}$ + $FeCl_{3(aq)}$ ------> _____

e. $Ba(OH)_{2(aq)}$ + $(NH_4)_2SO_{4(aq)}$------> _____

f. $KCl_{(aq)}$ + $Na_2SO_{4(aq)}$ ------> _____

* g. $Na_3PO_{4(aq)}$ + $Ba(NO_3)_{2(aq)}$ ------> _____

h. $Na_2S_{(aq)}$ + $Fe(NO_3)_{3(aq)}$ ------> _____

i. $AlCl_{3(aq)}$ + $K_2SO_{4(aq)}$ ------> _____

j. $AlCl_{3(aq)}$ + $K_2SO_{3(aq)}$ ------> _____

k. $CuCl_{2(aq)}$ + $CuNO_{3(aq)}$ (not an NR!) ------>_____

* l. $H_3PO_{4(aq)}$ + $Cu(NO_3)_{2(aq)}$ ------> _____

* m. $Ag_2SO_{4(aq)}$ + $(NH_4)_3PO_{4(aq)}$ ------> _____