Answer on question #58304 - Chemistry - General Chemistry

Question:

(1)$NaHCO_3$+ HCl
(2)HCl +Blue Dye
(3)Blue Dye +NaOCl +HCl
(4)NaOCl+KI+Starch
(5)KI+$Pb(NO_3)_2$
(6)$Pb(NO3)_2$+$CaCl_2$
(7)$CaCl_2$+$NaHSO_4$
(8)$NaHSO_4$+Na_2CO_3
(9)Na_2CO_3+Pheno.
(10)Pheno.+NaOH
(11)NaOH+$AgNO_3$
(12)$AgNO_3$+NH_4OH
(13)NH_4OH+$CuSO_4$
(14)$CuSO_4$+$NaHCO_3$

A. this list contains eight double-displacement reactions. Write a balanced chemical equation for five of those reactions.

B.Which reactions produced a precipitate?

Answer:

A. $NaHCO_3$+ HCl = NaCl + H_2O + CO_2
KI+$Pb(NO_3)_2$ = PbI_2↓ + 2KNO_3
$Pb(NO_3)_2$+$CaCl_2$ = $PbCl_2$↓ + $Ca(NO_3)_2$
$CaCl_2$+2$NaHSO_4$ = 2NaCl + $Ca(HSO_4)_2$↓
2NaOH+2$AgNO_3$ = Ag_2O↓ + H_2O + 2$NaNO_3$
2$AgNO_3$+2NH_4OH = Ag_2O↓ + H_2O + 2NH_4NO_3
2NH_4OH+$CuSO_4$ = $Cu(OH)_2$↓ + $(NH_4)_2SO_4$
$CuSO_4$+2$NaHCO_3$ = Na_2SO_4 + $Cu(HCO_3)_2$↓

B. KI+$Pb(NO_3)_2$ = PbI_2↓ + 2KNO_3
$Pb(NO_3)_2$+$CaCl_2$ = $PbCl_2$↓ + $Ca(NO_3)_2$
$CaCl_2$+2$NaHSO_4$ = 2NaCl + $Ca(HSO_4)_2$↓
2NaOH+2$AgNO_3$ = Ag_2O↓ + H_2O + 2$NaNO_3$
2$AgNO_3$+2NH_4OH = Ag_2O↓ + H_2O + 2NH_4NO_3
2NH_4OH+$CuSO_4$ = $Cu(OH)_2$↓ + $(NH_4)_2SO_4$
$CuSO_4$+2$NaHCO_3$ = Na_2SO_4 + $Cu(HCO_3)_2$↓