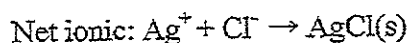
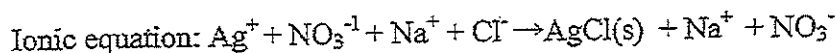
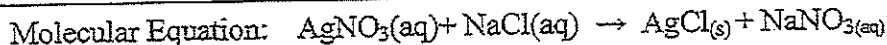


Name
Chemistry
Solubility Reactions #2



Complete Molecular, ionic, and net-ionic equations for the following

- (II)
- Solutions of sodium chromate and lead nitrate are mixed.

$$\text{Na}_2\text{CrO}_4(\text{aq}) + \text{Pb}(\text{NO}_3)_2(\text{aq}) \rightarrow 2\text{NaNO}_3(\text{aq}) + \text{PbCrO}_4(\text{s})$$

$$2\text{Na}^+ + \text{CrO}_4^{2-} + \text{Pb}^{2+} + 2\text{NO}_3^- \rightarrow 2\text{Na}^+ + 2\text{NO}_3^- + \text{PbCrO}_4(\text{s})$$

$$\text{Pb}^{2+} + \text{CrO}_4^{2-} \rightarrow \text{PbCrO}_4(\text{s})$$
 - A solution of lead (II) nitrate is added to a solution of potassium sulfate.

$$\text{Pb}(\text{NO}_3)_2 + \text{K}_2\text{SO}_4 \rightarrow 2\text{KNO}_3(\text{aq}) + \text{PbSO}_4(\text{s})$$

$$\text{Pb}^{2+} + 2\text{NO}_3^- + 2\text{K}^+ + \text{SO}_4^{2-} \rightarrow 2\text{K}^+ + 2\text{NO}_3^- + \text{PbSO}_4(\text{s})$$

$$\text{Pb}^{2+} + \text{SO}_4^{2-} \rightarrow \text{PbSO}_4(\text{s})$$
 - Excess concentrated potassium hydroxide solution is added to a solution of nickel(II) chloride.

$$2\text{KOH} + \text{NiCl}_2 \rightarrow 2\text{KCl}(\text{aq}) + \text{Ni}(\text{OH})_2(\text{s})$$

$$2\text{K}^+ + 2\text{OH}^- + \text{Ni}^{2+} + 2\text{Cl}^- \rightarrow 2\text{K}^+ + 2\text{Cl}^- + \text{Ni}(\text{OH})_2(\text{s})$$

$$2\text{OH}^- + \text{Ni}^{2+} \rightarrow \text{Ni}(\text{OH})_2(\text{s})$$
 - A solution of nickel (II) bromide is added to a solution of potassium hydroxide.

$$\text{NiBr}_2 + 2\text{KOH} \rightarrow \text{Ni}(\text{OH})_2(\text{s}) + 2\text{KBr}(\text{aq})$$

$$\text{Ni}^{2+} + 2\text{Br}^- + 2\text{K}^+ + 2\text{OH}^- \rightarrow \text{Ni}(\text{OH})_2(\text{s}) + 2\text{K}^+ + 2\text{Br}^-$$

$$\text{Ni}^{2+} + 2\text{OH}^- \rightarrow \text{Ni}(\text{OH})_2(\text{s})$$
 - A solution of potassium carbonate is added to a solution of strontium chloride.

$$\text{K}_2\text{CO}_3 + \text{SrCl}_2 \rightarrow \text{SrCO}_3(\text{s}) + 2\text{KCl}(\text{aq})$$

$$2\text{K}^+ + \text{CO}_3^{2-} + \text{Sr}^{2+} + 2\text{Cl}^- \rightarrow \text{SrCO}_3(\text{s}) + 2\text{K}^+ + 2\text{Cl}^-$$

$$\text{CO}_3^{2-} + \text{Sr}^{2+} \rightarrow \text{SrCO}_3(\text{s})$$
 - A solution of copper (II) chloride is added to a solution of sodium sulfide.

$$\text{CuCl}_2(\text{aq}) + \text{Na}_2\text{S}(\text{aq}) \rightarrow \text{CuS}(\text{s}) + 2\text{NaCl}(\text{aq})$$

$$\text{Cu}^{2+} + 2\text{Cl}^- + 2\text{Na}^+ + \text{S}^{2-} \rightarrow \text{CuS}(\text{s}) + 2\text{Na}^+ + 2\text{Cl}^-$$

$$\text{Cu}^{2+} + \text{S}^{2-} \rightarrow \text{CuS}(\text{s})$$