## Balancing Net Ionic Equations

Write the TOTAL Net Ionic Equation for each of the following reactions:
Don't forget to balance and simplify them in the end!!!

1. $\mathrm{Br}_{2(\mathrm{l})}+\mathrm{NaI}_{(\mathrm{aq})} \rightarrow \mathrm{NaBr}(\mathrm{aq})+\mathrm{I}_{2(\mathrm{~s})}$
2. $\mathrm{Ca}(\mathrm{OH})_{2(\text { aq })}+\mathrm{HCl}_{\text {(aq) }} \rightarrow \mathrm{CaCl}_{2(\mathrm{aq})}+\mathrm{H}_{2} \mathrm{O}_{\text {(l) }}$
3. $\mathrm{Mg}{ }_{(\mathrm{s})}+\mathrm{AgNO}_{3 \text { (aq) }} \rightarrow \mathrm{Ag}(\mathrm{s})+\mathrm{Mg}\left(\mathrm{NO}_{3}\right)_{2 \text { (aq) }}$

Use your solubility charts to identify which compound(s) are aqueous or not; and then balance and simplify the TOTAL Net Ionic Equation!
4. $\mathrm{AgNO}_{3}+\mathrm{KBr} \rightarrow \mathrm{AgBr}+\mathrm{KNO}_{3}$
5. $\mathrm{Ni}{ }_{(\mathrm{s})}+\mathrm{Pb}\left(\mathrm{NO}_{3}\right)_{2} \rightarrow \mathrm{Ni}\left(\mathrm{NO}_{3}\right)_{2}+\mathrm{Pb}(\mathrm{s})$
6. $\mathrm{Ca}+\mathrm{H}_{2} \mathrm{O} \rightarrow \mathrm{Ca}(\mathrm{OH})_{2}+\mathrm{H}_{2}$

Predict the products for each of the following reactions, write-balance-simplify the Total Net Ionic Equation for each reaction. ALSO, identify the spectator ions in each reaction.
7. $\mathrm{AgNO}_{3 \text { (aq) }}+\mathrm{CaCl}_{2 \text { (aq) }} \rightarrow$
8. $\mathrm{Al}_{(\mathrm{s})}+\mathrm{NiSO}_{4(\mathrm{aq})} \rightarrow$
9. $\mathrm{AgNO}_{3(\mathrm{aq})}+\mathrm{NaCl}_{(\mathrm{aq})} \rightarrow$

