## Reactions in Aqueous Solutions

$$AgNO_{3(aq)}$$
 +  $NaCl_{(aq)}$   $\Rightarrow$   $AgCl_{(5)}$  +  $NaNO_{3(aq)}$ 

### **Complete Ionic Equation**

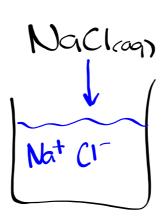
An equation that shows dissolved ionic compounds as dissociated free ions.

#### **Spectator Ion**

An ion that appears on both sides of the equation and is not directly involved in the reaction.

#### **Net Ionic Equation**

An equation for a reaction in solution that only shows the particles directly involved in the reaction.



# \*All net ionic equations must be balanced with respect to both mass and charge

Pb 
$$4g^{+}NO_{3}^{-}$$
  
Pb  $+2AgNO_{3(aq)} \Rightarrow 2Ag(s) + Pb(NO_{3})_{2(aq)}$ 

COMPLETE TONIC

Ph(s) + 
$$24c_{(4)}$$
 +  $2No_{3(4)}$   $\longrightarrow 24g(s)$  +  $Pb_{(4)}^{2+}$  +  $2No_{3(4)}^{-}$ 

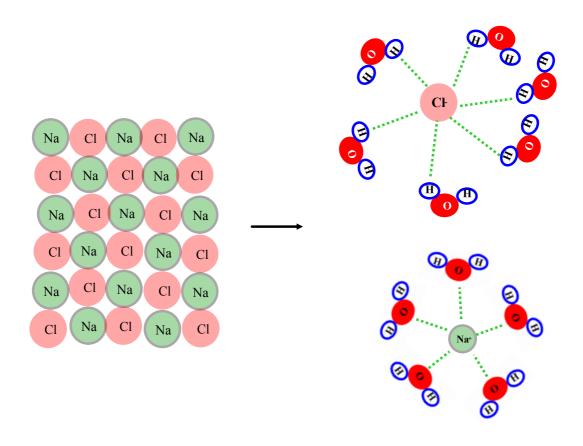
# Homework

Worksheet

Bat 103 barium chloride and silver nitrate

Baclz(09) + AgNO3(09) -> Ba(NO3)2(09) + AgCl(s)

## What happens when an ionic compound dissolves??



This process is called solvation.