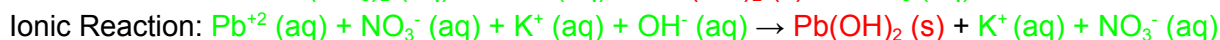
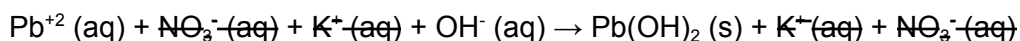


Net Ionic Reaction Notes

1. Rewrite the chemical reaction and keep anything that is **solid**, liquid, or gas together, but write anything that is **aqueous** as the individual ions. This is now called an "ionic reaction"



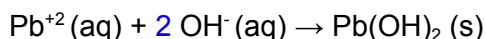
2. Now cancel out anything from the Ionic Reaction that is EXACTLY the same (just like in algebra)



3. Rewrite what is left over. This is the **NET IONIC REACTION!**



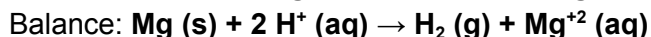
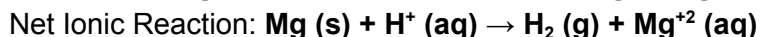
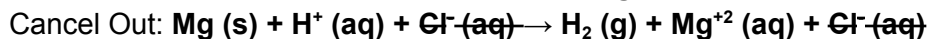
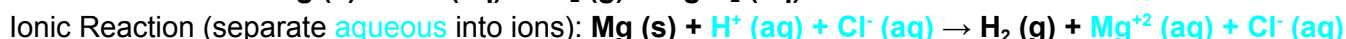
4. Finally you might need to **balance** your net ionic reaction



Everything that you crossed out of the ionic reaction is known as **spectator ions** (because they just hang out and watch a reaction happen).

Another way to think about net ionic reactions is anything that starts out in a chemical reaction as aqueous and stays aqueous **does not** make it into the net ionic reaction, but if it starts out as a solid, liquid or gas and becomes aqueous, it **is** included in the net ionic. Same goes for anything that starts out as aqueous and turns to solid, liquid, or gas.

Here is another example:



Final note: Once you balance the net ionic reaction, the **charges** on the reactants and products side should balance each other out to be ZERO. Notice that on the reactants side, you have two +1 charges (total charge = +2) and on the product side you have one +2 charge (total charge = +2)

