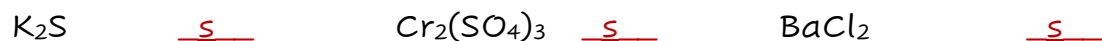
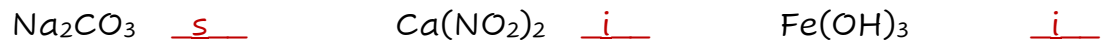


Solubility and Precipitation Reactions

Indicate if the following are soluble (s) or insoluble (i) in water.



Write a molecular equation for the mixing of aqueous solutions of CaCl_2 and K_3PO_4 .



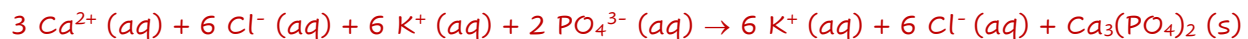
KCl is soluble but $\text{Ca}_3(\text{PO}_4)_2$ is insoluble.

The molecular equation is: (we had to balance the equation)



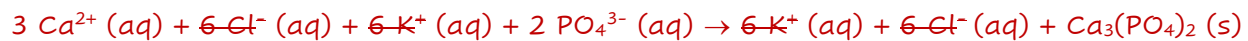
Write the ionic equation.

$\text{CaCl}_2 (\text{aq})$, $\text{K}_3\text{PO}_4 (\text{aq})$, and $\text{KCl} (\text{aq})$ are soluble in water. $\text{Ca}_3(\text{PO}_4)_2$ is a solid. The net ionic equation is:

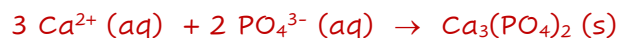


Write a net ionic equation.

From the ionic equation we see ions that cancel out



The chloride ions and potassium ions cancel out leaving us with the net ionic equation



Which are the spectator ions?

The Cl^- ions and K^+ ions