Double Displacement Reactions

Write the formula for the salt that would form from the following pairs of cations and anions.

Ca2+ and OH- Fe3+ and S2- Ag+ and O2-

Na+ and PO43- Pb4+ and SO42- Mg2+ and CO32-

Write down the ions that form when the following salts are dissolved in water.

Ca(NO3)2 MnCl4 Cr2S3

Which of the following salts would be soluble in water?

BaSO4 (NH4)2CO3 CaCl2 Fe(OH)2 K3PO4

Complete the following reactions by predicting the products, balancing the reaction, and labelling the products with the correct states. If no reaction occurs you can just write NR.

K2O (aq) + FeI2 (aq) 🡪

Ba(NO3)2 (aq) + Na3PO4 (aq) 🡪

KOH (aq) + H3PO4 (aq) 🡪

Cu(NO3)2 (aq) + FeCl3 9aq) 🡪

NH4OH (aq) + H2SO4 (aq) 🡪

Write the complete ionic and net ionic equations for the following reactions.

AgNO3 (aq) + KBr (aq) 🡪 AgBr (s) + KNO3 (aq)

Na2SO4 (aq) + Pb(NO3)2 (aq) 🡪 PbSO4 (s) + 2NaNO3 (aq)

3 Ba(OH)2 (aq) + 2 H3PO4 (aq) 🡪 6 H2O (l) + Ba3(PO4)2