Solution

1.) Write an equation for the dissociation of each of the following in water
a.) $BaCl_2$ (s) → _____
b.) $AgNO_3$ (s) → _____
c.) $Mg(OH)_2$ (s) → _____
d.) Na_2SO_4 (s) → _____
e.) NH_4NO_3 (s) → _____
f.) $(NH_4)_3PO_4$ (s) → _____

2.) Which of the above solutions are electrical conductors

3.) If 1.00 L of a 1.00 mol/L solution of $AgNO_3$ was mixed, then
a.) $[Ag^+]$ = _____
b.) $[NO_3^-]$ = _____

4.) If 500.0 mL of a 1.00 mol/L solution of $BaCl_2$ was mixed, then
a.) How many moles of Ba^{2+} are present? _____
b.) $[Ba^{2+}]$ = _____
c.) How many moles of Cl^- are present? _____
d.) $[Cl^-]$ = _____

5.) If 500.0 mL of 1.00 mol/L NaCl was added to the solution in question 4, then
a.) $[Ba^{2+}]$ = _____
b.) $[Cl^-]$ = _____

More solutions

1.) For each of the following combinations of equal volumes of 0.20 mol/L aqueous solutions,
1.) Identify the possible products by formula
2.) State which (if any) product has a low solubility (will precipitate)
3.) If there **is** a precipitate, write the **formula equation** and **net ionic equation** for the reaction

a.) $MgS + Sr(OH)_2$
b.) $CuBr_2 + Pb(NO_3)_2$
c.) $FeBr_3 + SrI_2$
d.) $Ba(NO_3)_2 + Li_2SO_4$
e.) $K_3PO_4 + CuCl_2$
f.) zinc (II) sulphate and lithium carbonate

g.) iron (III) nitrate and magnesium sulphide
h.) beryllium sulphate and ammonium carbonate
i.) cobalt (II) sulphate and lithium carbonate
j.) magnesium sulphate and strontium hydroxide