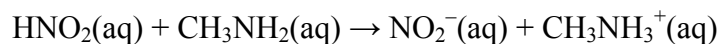


Answers to Practice Problems

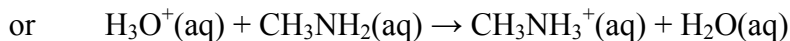
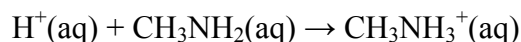
(*comments in italics*)

Nitrous acid (HNO₂) reacts with methylamine, CH₃NH₂



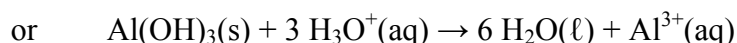
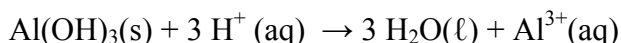
Nitrous acid is weak; methylamine is a weak base; H⁺ is transferred from acid to base

Nitric acid (HNO₃) reacts with methylamine, CH₃NH₂



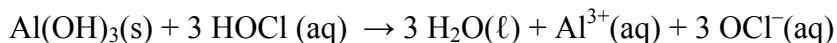
Nitric acid is strong, so written as ions. Nitrate is a spectator.

Solid Aluminum hydroxide dissolves in HCl(aq).



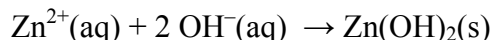
This example illustrates the fact that it is easier to work with H⁺ than H₃O⁺

Solid Aluminum hydroxide dissolves in HOCl(aq).



When it says "solid" write that reactant as (s). HOCl is weak acid.

Aqueous sodium hydroxide is mixed with aqueous zinc nitrate.

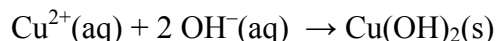


Both reactants are soluble salts, so write as ions. Na⁺ and NO₃⁻ are spectators.

Copper (II) nitrate solution is mixed with potassium acetate solution.

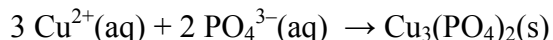
no reaction

Copper (II) nitrate solution is mixed with potassium hydroxide solution.



Both reactants are soluble salts, so write as ions. K⁺ and NO₃⁻ are spectators.

Copper (II) nitrate solution is mixed with potassium phosphate solution.



Both reactants are soluble salts, so write as ions. K⁺ and NO₃⁻ are spectators.