Double Replacement Reaction Equations

1. Balance each equation for a double replacement reaction.

(a) Na2SO4  + BaCl2 → BaSO4  + NaCl

(b) HNO3  + Ba(OH)2 → H2O + Ba(NO3)2

(c) Na2CO3  + Fe(NO3)3 → Fe2(CO3)3  + NaNO3

(d) CaCl2  + K3PO4 → Ca3(PO4)2  + KCl

(e) Al2(SO4)3  + Ba(OH)2 → Al(OH)3  + BaSO4

(f) NaOH + H2SO4 → H2O + Na2SO4

(g) Na3PO4  + Ag2SO4 → Na2SO4  + Ag3PO4

(h) Na2CrO4  + Cu(NO3)2 → NaNO3  + CuCrO4

(i) H3PO4  + KOH → H2O + K3PO4

(j) Na2CO3  + HNO3 → H2CO3  + NaNO3

2. Write a balanced chemical equation to represent each reaction described below.

(a) Solutions of sodium hydroxide and hydrochloric acid react.

(b) A silver nitrate solution reacts with a sodium chloride solution.

BLM 2-37, Double Replacement Reaction Equations

1. (a) Na2SO4 + BaCl2 → BaSO4 + 2NaCl

(b) 2HNO3+ Ba(OH)2 → 2H2O+ Ba(NO3)2

(c) 3Na2CO3 + 2Fe(NO3)3 → Fe2(CO3)3 + 6NaNO3

(d) 3CaCl2+ 2K3PO4→ Ca3(PO4)2 + 6KCl

(e) Al2(SO4)3 + 3Ba(OH)2 → 2Al(OH)3 + 3BaSO4

(f) 2NaOH+ H2SO4 → 2H2O+ Na2SO4

(g) 2Na3PO4 + 3Ag2SO4 → 3Na2SO4 + 2Ag3PO4

(h) Na2CrO4 + Cu(NO3)2 → 2NaNO3 + CuCrO4

(i) H3PO4 + 3KOH → 3H2O+ K3PO4

(j) Na2CO3 + 2HNO3 → H2CO3 + 2NaNO3

2. (a) NaOH + HCl → H2O + NaCl

(b) AgNO3 + NaCl → AgCl + NaNO3