

- d. $Mg(H_2PO_4)_2 \rightarrow Mg + 2H_2 + 2P + 4O_2$
 Reaction Type (decomposition)
- e. $Cl_2 + 2KI \rightarrow I_2 + 2KCl$
 Reaction Type (SR)
- f. $2Al + 3F_2 \rightarrow 2AlF_3$
 Reaction Type Synthesis
- g. $Zn + Cu(ClO_3)_2 \rightarrow Cu + Zn(ClO_3)_2$
 Reaction Type (SR)
- h. $2Co(NO_3)_3 + 3(NH_4)_2C_2O_4 \rightarrow Co_2(C_2O_4)_3 + 6NH_4NO_3$
 Reaction Type (DR)
 $\boxed{Co^{3+} \times NH_4^+ \quad NO_3^- \quad C_2O_4^{2-}}$
- i. $C_{12}H_{25}OH + 18O_2 \rightarrow 12CO_2 + 13H_2O$
 Reaction Type Combustion
- j. $Sr(OH)_2 + 2HNO_3 \rightarrow 2H_2O + Sr(NO_3)_2$
 Reaction Type neutralization or DR
- k. $4V + 5O_2 \rightarrow 2V_2O_5$ (or $2, \frac{5}{2}, 1$)
 (Assume combining capacity of V is 5+)
 Reaction Type Synthesis
- l. $Rb_3AsO_4 \rightarrow 3Rb + As + 2O_2$
 Reaction Type decomposition
- m. $3CsOH + H_3PO_4 \rightarrow 3H_2O + Cs_3PO_4$
 Reaction Type neutralization or DR
- n. $3Ni(NO_3)_2 + 2(NH_4)_3PO_4 \rightarrow Ni_3(PO_4)_2 + 6NH_4NO_3$
 $\boxed{Ni^{2+} \times NH_4^+ \quad NO_3^- \quad PO_4^{3-}}$
 Reaction Type (DR)