Types of Reactions Inquiry Activity

Decomposition:

2H2O  2H2 + O2

NaCl  Na + Cl

PbO2  Pb + O2

2H2O2  2H2O + O2

CaCO3  CaO + CO2

Define Decomposition:

Generic Formula:

Synthesis:

C + O2  CO2

Mg + F2  MgF2

S8 + 8O2  8SO2

2CO + O2  2CO2

4Al + 3O2  2Al2O3

Define Decomposition:

Generic Formula:

Single Replacement:

Zn + 2HCl  H2 + ZnCl2

2Fe + 3H2SO4  Fe2(SO4)3 + 3H2

Cu + 2AgNO3  Cu(NO3)2 + 2Ag

3Na + CoCl3  3NaCl + Co

2Ca + PbO2  2CaO + Pb

Single Replacement Definition:

Generic formula:

Double Replacement:

K2CrO4 + Ba(NO3)2  BaCrO4 + 2KNO3

ZnBr2 + 2AgNO3  Zn(NO3)2 + 2AgBr

2HCl + Pb(OH)2  PbCl2 + 2H2O

Na2Se + MgF2  2NaF + MgSe

Al2S3 + 6KCN  2Al(CN)3 + 3K2S

Double Replacement Definition:

Generic Formula:

Combustion:

CH4 + 2O2  CO2 + 2H2O

C3H8 + 5O2  3CO2 + 4H2O

2C8H18 + 25O2  16CO2 + 18H2O

2C2H6 + 7O2  4CO2 + 6H2O

2C2H4O3 + 3O2  4CO2 + 4H2O

Combustion Definition:

Generic Formula:

Types of Reactions

Decomposition:

Synthesis:

Single Replacement:

Double Replacement:

Combustion: