

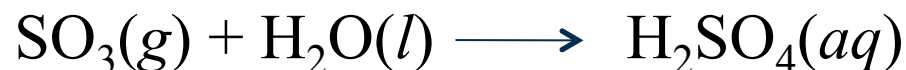
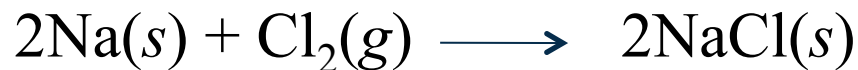
Combination Reactions

In a **combination reaction**,

- two or more elements form one product
- simple compounds combine to form one product

Combination

Two or more reactants combine to yield a single product



Decomposition Reaction

In a **decomposition reaction**, one substance splits into two or more simpler substances.

Decomposition

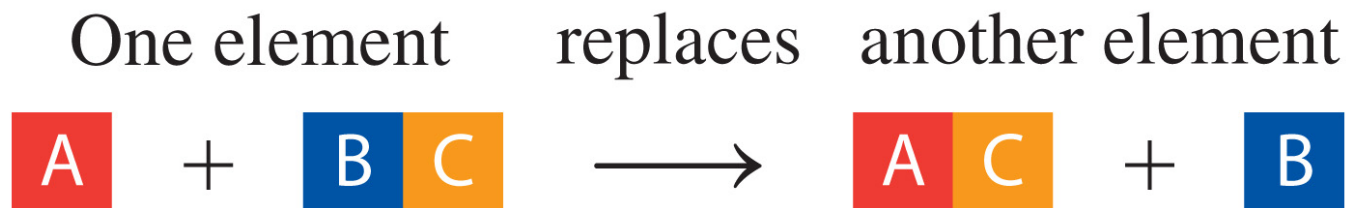
A
reactant splits
 into two or more
 products



Single Replacement Reaction

In a **single replacement** reaction, one element takes the place of a different element in another reacting compound.

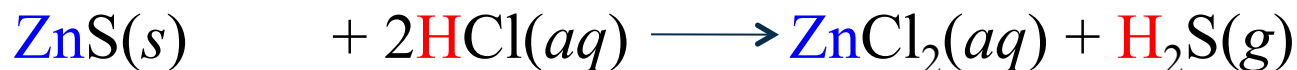
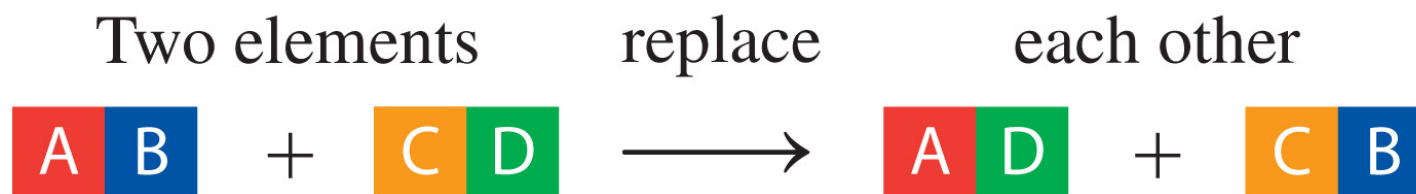
Single replacement



Double Replacement Reaction

In a **double replacement**, the positive ions in the reactant compounds switch places.

Double replacement



Combustion Reaction

In a **combustion reaction**,

- a carbon-containing compound burns in oxygen gas to form carbon dioxide (CO₂) and water (H₂O)
- energy is released as a product in the form of heat



Study Check

Identify each reaction as combination, decomposition, combustion, single replacement, or double replacement.

