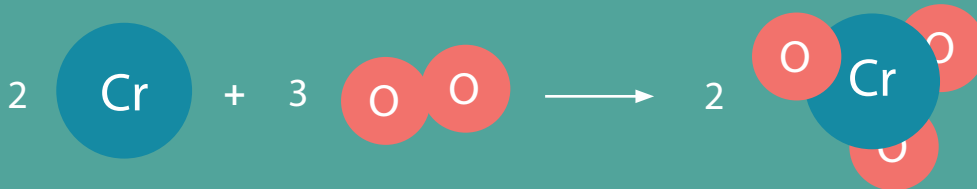


# COMMON TYPES OF CHEMICAL REACTIONS

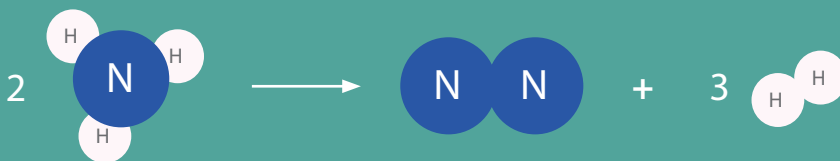
## SYNTHESIS

Multiple reactants, which can be simple elements or compounds, combine together to form a single compound.



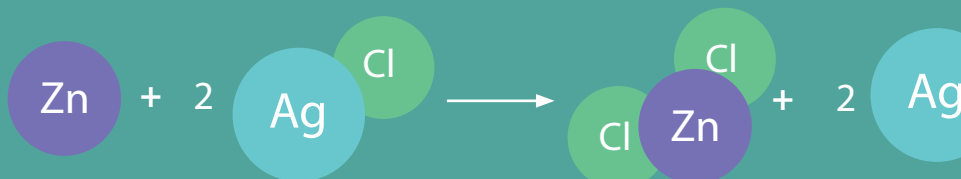
## DECOMPOSITION

A compound breaks down into two or more simpler substances. Decomposition reactions are classified into thermal, electrolytic, and photo.



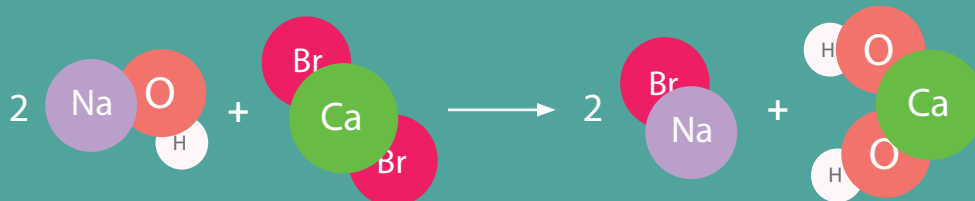
## SINGLE-REPLACEMENT

One element is substituted for another element in a compound, generating a new compound and a pure element.



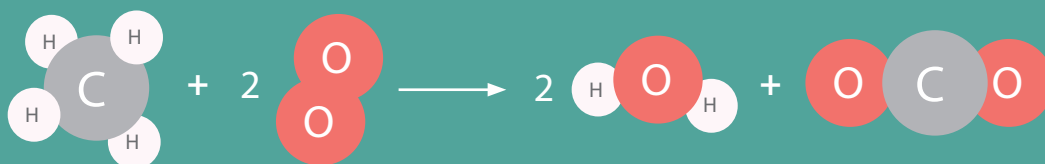
## DOUBLE-REPLACEMENT

Two ionic compounds exchange cations or anions to form two new compounds. Forming a precipitate can help drive the reaction to the right.



## COMBUSTION

A fuel, typically a hydrocarbon, reacts with oxygen gas to form carbon dioxide and water, which generates heat and light.



## NEUTRALIZATION

Acid and base combine to neutralize each other in aqueous solutions, usually resulting in a salt and water.

