

## Decomposition Reactions

### Decomposition Reaction

A chemical reaction where a single ionic compound or covalent molecule breaks apart into two ions or atoms

### Ionization

The process of producing two or more ions from a single ionic compound



Ionization is a form of a decomposition reaction that occurs in water ( $H_2O$ )

### Decomp Reaction



Reactant	Products
AB	A + B
Ionic Compound	Metal or Hydrogen Ion
Covalent Molecule	Non-Metal, Diatomic Element, or poly. ion

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### Diatomic Elements

A group of non-metals always exist as a pair of atoms based on their electron dot structure and covalent bonding.

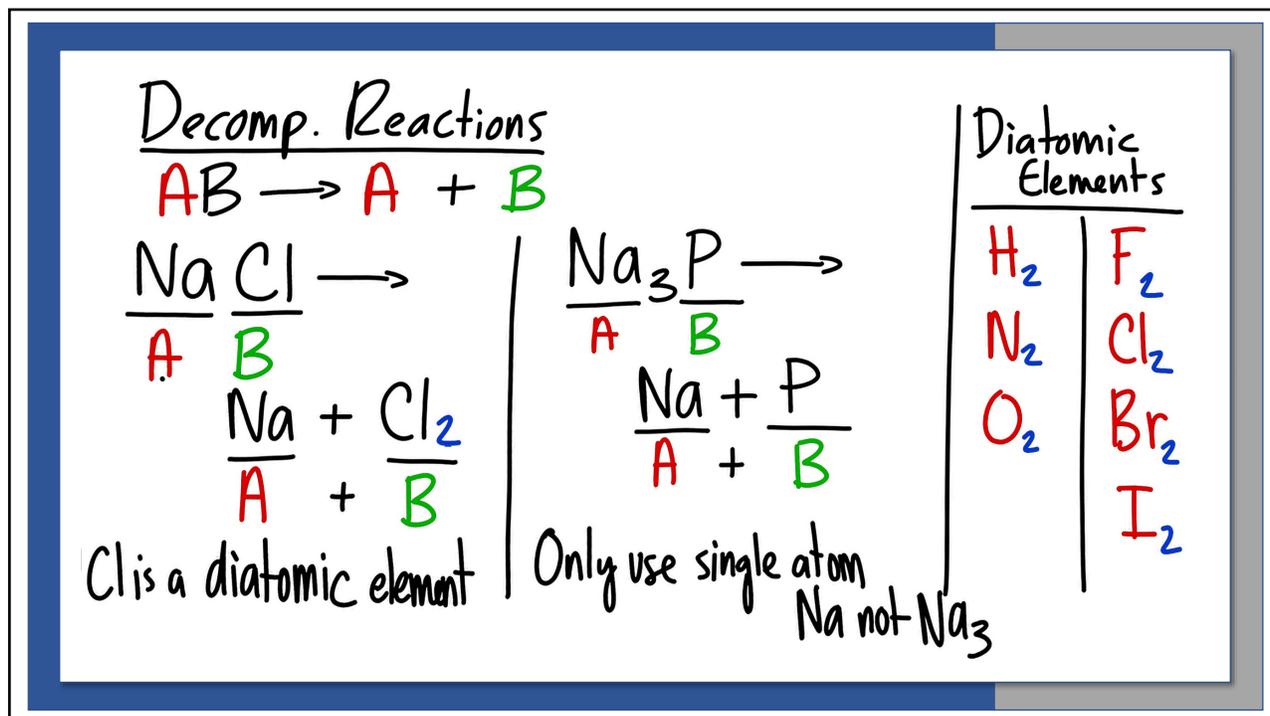
Hydrogen	$H_2$		
Nitrogen	$N_2$	Oxygen	$O_2$
Fluorine	$F_2$	Chlorine	$Cl_2$
Bromine	$Br_2$	Iodine	$I_2$

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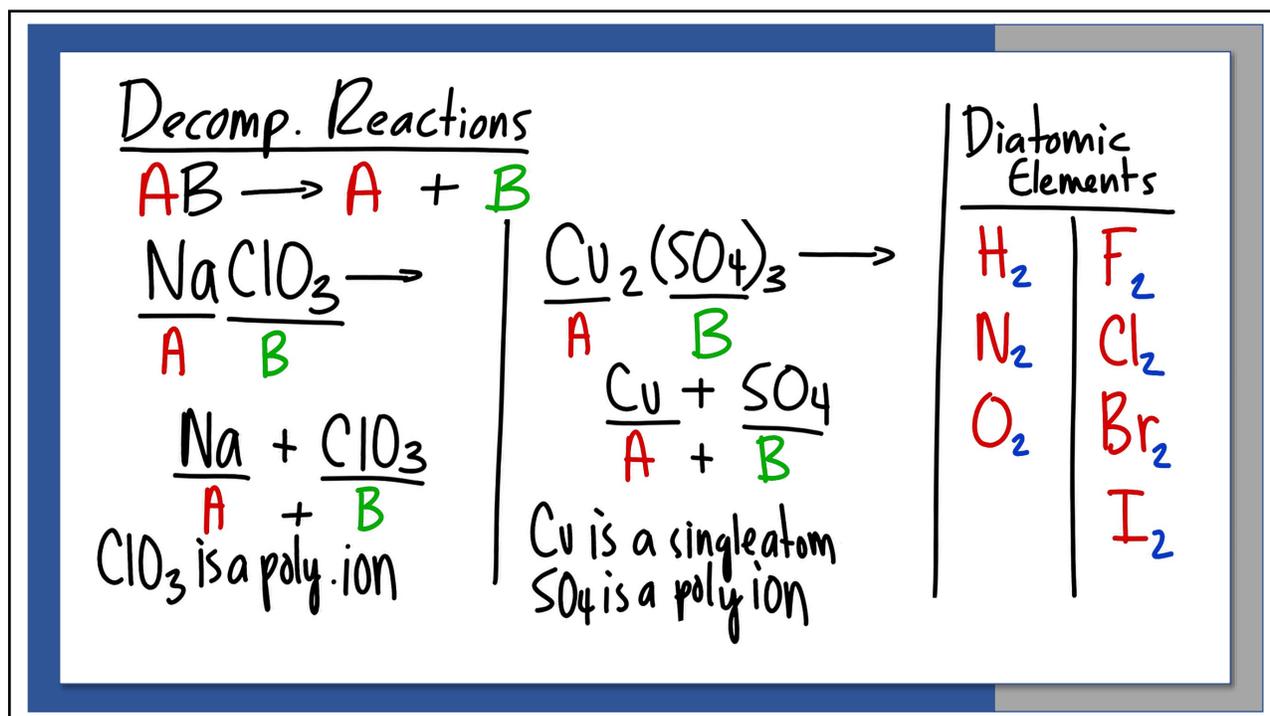


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