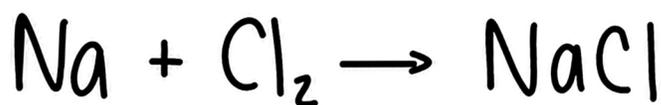


# Noteset 6A (Part 1) - In Class Noteset

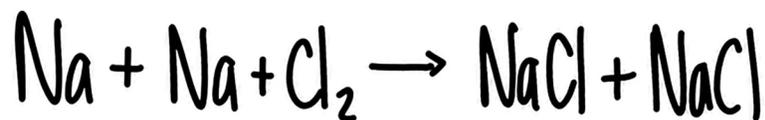
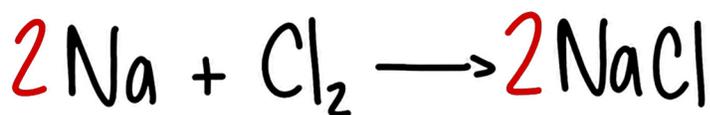
## Chemical Reaction Review

### Balanced Chemical Reaction Review

#### Unbalanced Reaction



#### Balanced Reaction



### Counting Atoms in a Balanced Chemical Reaction

#### Molar Ratio

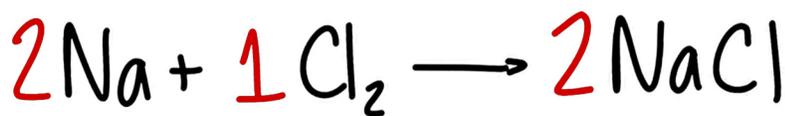
Each coefficient

in a chemical reaction

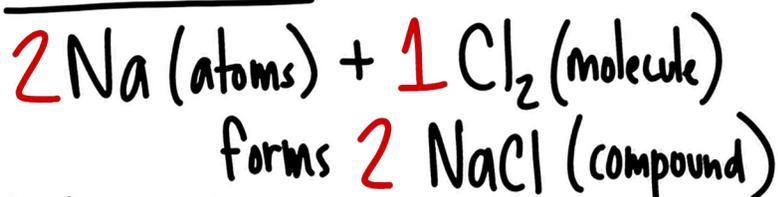
can be read in two ways

① Atomic Ratio (Ind. Atoms)

② Molar Ratio (mol of Atoms)



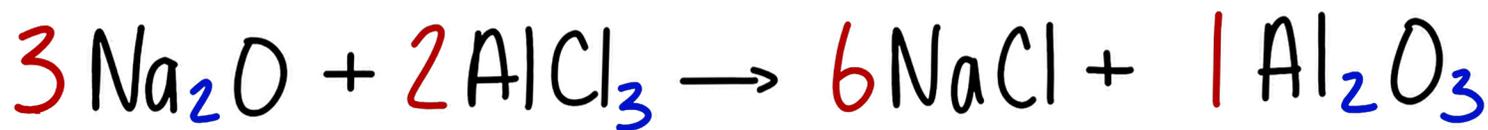
#### Atomic Ratio



#### Molar Ratio

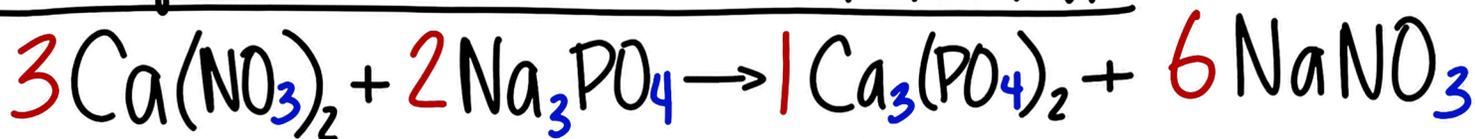


## Counting Atoms w/ coefficients in reaction



<u>Na<sub>2</sub>O</u>	<u>AlCl<sub>3</sub></u>	<u>NaCl</u>	<u>Al<sub>2</sub>O<sub>3</sub></u>
<u>Na<sub>2</sub>O : 3</u>	<u>AlCl<sub>3</sub> : 2</u>	<u>NaCl : 6</u>	<u>Al<sub>2</sub>O<sub>3</sub> : 1</u>
Na : 3 · 2 = 6	Al : 2 · 1 = 2	Na : 6 · 1 = 6	Al : 1 · 2 = 2
O : 3 · 1 = 3	Cl : 2 · 3 = 6	Cl : 6 · 1 = 6	O : 1 · 3 = 3

## Counting Atoms w/ coefficients in reaction



<u>Ca(NO<sub>3</sub>)<sub>2</sub></u>	<u>Na<sub>3</sub>PO<sub>4</sub></u>	<u>Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub></u>	<u>NaNO<sub>3</sub></u>
<u>Ca(NO<sub>3</sub>)<sub>2</sub> : 3</u>	<u>Na<sub>3</sub>PO<sub>4</sub> : 2</u>	<u>Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub> : 1</u>	<u>NaNO<sub>3</sub> : 6</u>
Ca : 3 · 1 = 3	Na : 2 · 3 = 6	Ca : 1 · 3 = 3	Na : 6 · 1 = 6
N : 3 · 1 · 2 = 6	P : 2 · 1 = 2	P : 1 · 1 · 2 = 2	N : 6 · 1 = 6
O : 3 · 3 · 2 = 18	O : 2 · 4 = 8	O : 1 · 4 · 2 = 8	O : 6 · 3 = 18