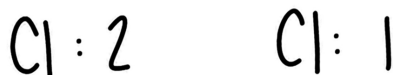
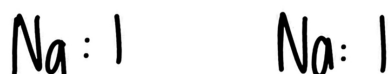
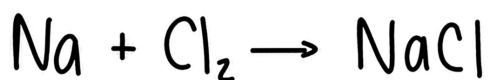
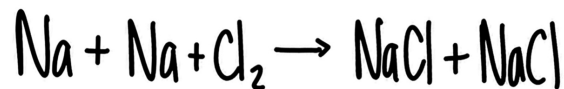
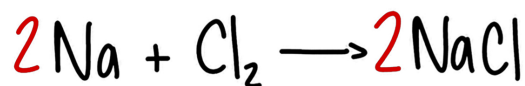


Balanced Chemical Reaction Review

Unbalanced Reaction



Balanced Reaction



2

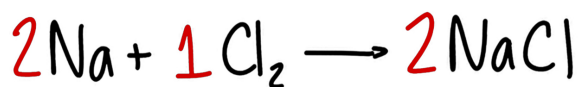
Molar Ratio in Balanced Equations

Molar Ratio

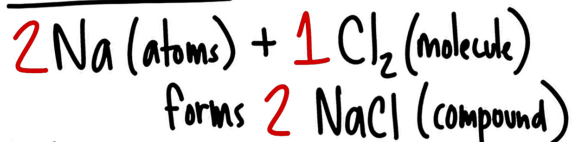
Each coefficient

in a chemical reaction
can be read in two ways

- ① Atomic Ratio (Ind. Atoms)
- ② Molar Ratio (mol of Atoms)



Atomic Ratio

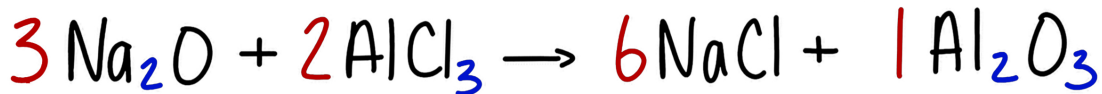


Molar Ratio



3

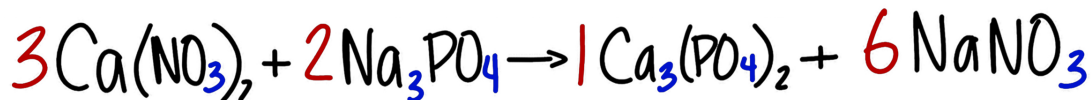
Counting Atoms in Balanced Equations



<u>Na₂O</u>	<u>AlCl₃</u>	<u>NaCl</u>	<u>Al₂O₃</u>
<u>Na₂O : 3</u>	<u>AlCl₃ : 2</u>	<u>NaCl : 6</u>	<u>Al₂O₃ : 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

4

Counting Atoms in Balanced Equations



<u>Ca(NO₃)₂</u>	<u>Na₃PO₄</u>	<u>Ca₃(PO₄)₂</u>	<u>NaNO₃</u>
<u>Ca(NO₃)₂ : 3</u>	<u>Na₃PO₄ : 2</u>	<u>Ca₃(PO₄)₂ : 1</u>	<u>NaNO₃ : 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

5