



Part I Combination/Synthesis - Predict the products & balance the following:

The ID key for Combination/Synthesis is _____

Reactants	Products	Reaction
$H_2 + S \rightarrow$		<i>C/S</i>
$K + Cl_2 \rightarrow$		<i>C/S</i>
$Ba + N_2 \rightarrow$		<i>C/S</i>
$Na + O_2 \rightarrow$		<i>C/S</i>
$B + F_2 \rightarrow$		<i>C/S</i>

Part II Decomposition - Predict the products & balance the following:

The ID key for Decomposition is _____

$GaBr_3 \rightarrow$		<i>D</i>
$SF_2 \rightarrow$		<i>D</i>
$Al_2O_3 \rightarrow$		<i>D</i>
$P_2S_5 \rightarrow$		<i>D</i>
$H_2O_2 \rightarrow$		<i>D</i>

Part III Single Replacement - Predict the products & balance the following:

The ID key for Single Replacement is _____

$Cr + Fe(NO_3)_2 \rightarrow$		<i>SR</i>
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$\text{Na}_2\text{SO}_3 + \text{Ba} \rightarrow$		SR
$\text{BCl}_3 + \text{F}_2 \rightarrow$		SR
$\text{Zn} + \text{Al}_2(\text{CO}_3)_3 \rightarrow$		SR
$\text{K} + \text{H}(\text{OH}) \rightarrow$		SR

Part IV Double Replacement - Predict the products & balance the following:

The ID key for Double Replacement is _____

$\text{FeCl}_3 + \text{H}_2\text{S} \rightarrow$		DR
$\text{AgNO}_3 + \text{NaI} \rightarrow$		DR
$\text{Ca}(\text{OH})_2 + \text{H}_2\text{CO}_3 \rightarrow$		DR
$\text{KCN} + \text{H}_3\text{PO}_4 \rightarrow$		DR
$\text{CaBr}_2 + \text{Li}_2\text{O} \rightarrow$		DR

Part V Combustion - Predict the products & balance the following:

The ID key for Combustion is _____

$\text{CH}_4 + \underline{\hspace{2cm}} \rightarrow$		C
$\text{C}_2\text{H}_4 + \underline{\hspace{2cm}} \rightarrow$		C
$\text{C}_2\text{H}_6 + \underline{\hspace{2cm}} \rightarrow$		C
$\text{CH}_3\text{OH} + \underline{\hspace{2cm}} \rightarrow$		C
$\text{C}_2\text{H}_5\text{OH} + \underline{\hspace{2cm}} \rightarrow$		C