

Types of Chemical Reactions

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1. Synthesis reactions
2. Decomposition reactions
3. Single displacement reactions
4. Double displacement reactions
5. Combustion reactions
6. Redox Reactions





According to your Performance Standards, you need to be able to identify each type.

Let us first understand each type of reactions

Watch the movie and then complete the chart.

Chemical
Reactions

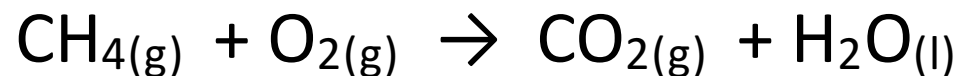
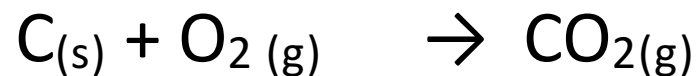


Reaction	Definition	★ Equation
Synthesis	Two or more elements or compounds combine to make a more complex substance	$A + B \rightarrow AB$ 
Decomposition	Compounds break down into simpler substances	$AB \rightarrow A + B$ 
Single Replacement	Occurs when one element replaces another one in a compound	$AB + C \rightarrow AC + B$ 
Double Replacement	Occurs when different atoms in two different compounds trade places	$AB + CD \rightarrow AD + CB$ 

A = Red B = Blue C = Green D = Yellow

Combustion Reaction

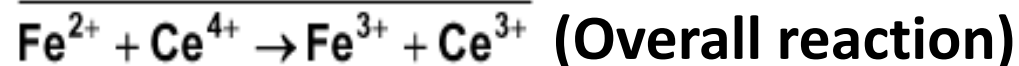
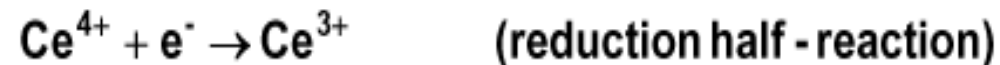
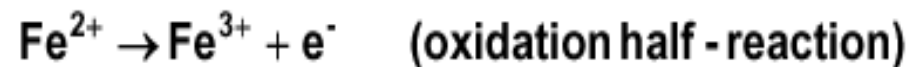
The burning of carbon or carbon compounds to give carbon dioxide and water. Note: You will get only carbon dioxide when carbon burns; No water will be formed.



Redox Reaction

Reaction between two cations

The ion with higher charge becomes an ion with smaller charge (Reduction); the ion with smaller charge becomes an ion with higher charge (Oxidation)



Identify the Types of Chemical Reaction in each of the following

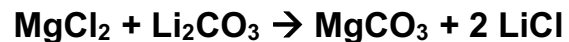
Balance the reactions 1 to 6 and indicate which type of chemical reaction (synthesis, decomposition, single-displacement, double-displacement or combustion) is being represented:



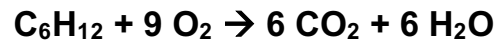
Indicate which type of chemical reaction (synthesis, decomposition, single-displacement, double-displacement or combustion) is being represented in 7 to 20.



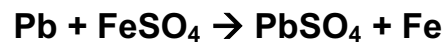
Reaction Type _____



Reaction Type _____



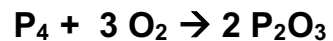
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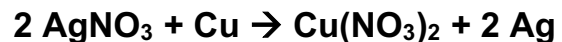
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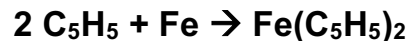
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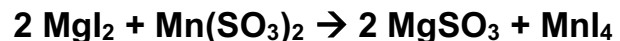
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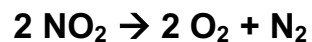
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