


N www.regents.academy	605 Types of Chemical Reactions	
	Objectives 1. Classify chemical reactions	

605.1. What are synthesis reactions?

Example.

605.2. What are decomposition reactions?

Example.

605.3 What are single replacement reactions?

Example

605.4 What are double replacement reactions?

Example

605.5 What are combustion reactions?

Example

605 Concept Check Questions

Classify the following chemical reactions.

1. $2\text{Al}_2\text{O}_3(\text{s}) \rightarrow 4\text{Al}(\text{s}) + 3\text{O}_2(\text{g})$	
2. $\text{Br}_2(\text{g}) + \text{BaI}_2(\text{s}) \rightarrow \text{BaBr}_2(\text{s}) + \text{I}_2(\text{g})$	
3. $2\text{C}_2\text{H}_5(\text{g}) + 5\text{O}_2(\text{g}) \rightarrow 4\text{CO}_2(\text{g}) + 2\text{H}_2\text{O}(\text{g})$	
4. $\text{BaCl}_2(\text{aq}) + \text{K}_2\text{CO}_3(\text{aq}) \rightarrow \text{BaCO}_3(\text{s}) + 2\text{KCl}(\text{aq})$	
5. $\text{Pb}(\text{s}) + \text{O}_2(\text{g}) \rightarrow \text{PbO}_2(\text{s})$	
6. $\text{Zn}(\text{s}) + \text{CuCl}_2(\text{aq}) \rightarrow \text{Cu}(\text{s}) + \text{ZnCl}_2(\text{aq})$	
7. $\text{C}_5\text{H}_8(\text{g}) + 7\text{O}_2(\text{g}) \rightarrow 5\text{CO}_2(\text{g}) + 4\text{H}_2\text{O}(\text{g})$	
8. $\text{AgNO}_3(\text{aq}) + \text{NaCl}(\text{aq}) \rightarrow \text{AgCl}(\text{s}) + \text{NaNO}_3(\text{aq})$	
9. $2\text{K}(\text{s}) + \text{Cl}_2(\text{g}) \rightarrow 2\text{KCl}(\text{s})$	
10. $\text{Mg}(\text{s}) + 2\text{HCl}(\text{aq}) \rightarrow \text{MgCl}_2(\text{aq}) + \text{H}_2(\text{g})$	