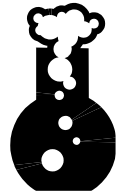


# Chemical Reactions

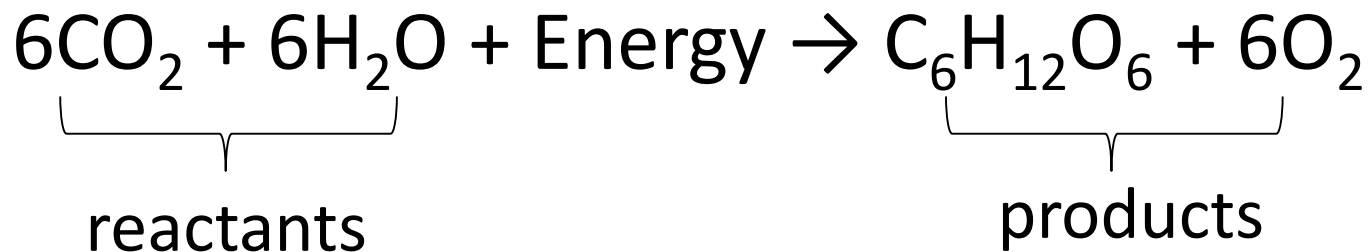


Chemical reaction - A rearrangement of the atoms or molecules of two or more substances that come into contact with each other; results in the formation of one or more **new substances**.

The new substances (products) have different physical and chemical properties than the original substances (reactants).



Energy is needed to convert reactants into products.



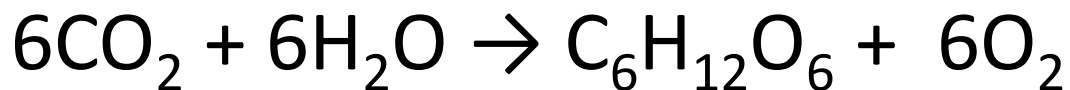
# Chemical Formula

Example:  $\text{H}_2\text{O}$  = **2 hydrogen atoms** and **1 oxygen atom**

subscript

coefficient

$2\text{H}_2\text{O}$  - two water molecules = **4 hydrogen atoms** and  
**2 oxygen atoms**



Answer: How many C, H and O atoms are on the reactant side of the equation?

Answer: How many C, H and O atoms are on the product side of the equation?

