

Balance and identify the type of reaction for each question:

Equation	Type of Reaction
$\text{Sn} + \text{Cl}_2 \rightarrow \text{SnCl}_4$	
$\text{Fe} + \text{Cl}_2 \rightarrow \text{FeCl}_3$	
$\text{Fe} + \text{O}_2 \rightarrow \text{Fe}_2\text{O}_3$	
$\text{Al} + \text{Cl}_2 \rightarrow \text{Al}_2\text{Cl}_6$	
$\text{CaO} + \text{HCl} \rightarrow \text{CaCl}_2 + \text{H}_2\text{O}$	
$\text{C}_6\text{H}_6 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$	
$\text{Mg} + \text{HCl} \rightarrow \text{MgCl}_2 + \text{H}_2$	
$\text{Al}(\text{OH})_3 \rightarrow \text{Al}_2\text{O}_3 + \text{H}_2\text{O}$	
$\text{Al} + \text{H}_2\text{SO}_4 \rightarrow \text{Al}_2(\text{SO}_4)_3 + \text{H}_2$	
$\text{NaOH} + \text{H}_2\text{SO}_4 \rightarrow \text{Na}_2\text{SO}_4 + \text{H}_2\text{O}$	

What type of reaction is happening? What are the products?

There is one of each type of reaction.

(You do not need to balance the equations)

Don't forget about which elements form diatomic molecules!

Equation	Type of Rxns	Product or Products
$\text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2 \rightarrow ?$		
$2\text{NaCl} \rightarrow ?$		
$\text{Mg} + \text{H}_2\text{O} \rightarrow ?$		
$\text{CO}_2 + \text{H}_2\text{O} \rightarrow ?$	synthesis	
$\text{K}_2(\text{CO}_3) + \text{BaCl}_2 \rightarrow ?$		