THE LAW OF CONSERVATION OF MASS IN CHEMICAL REACTIONS

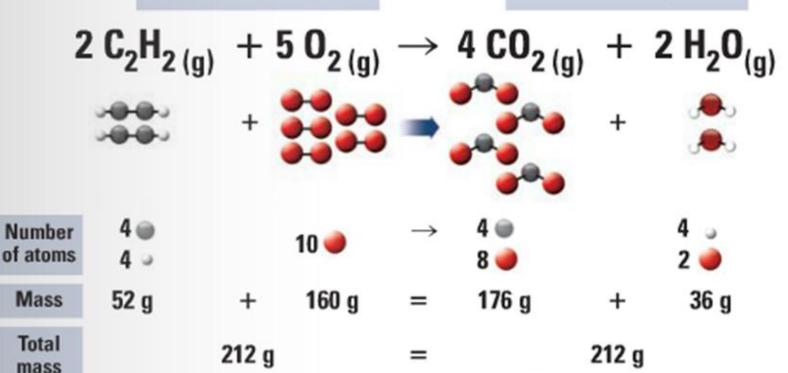
Molecules of the reactants

Molecules of the products

Carbon (C)

Oxygen (0)

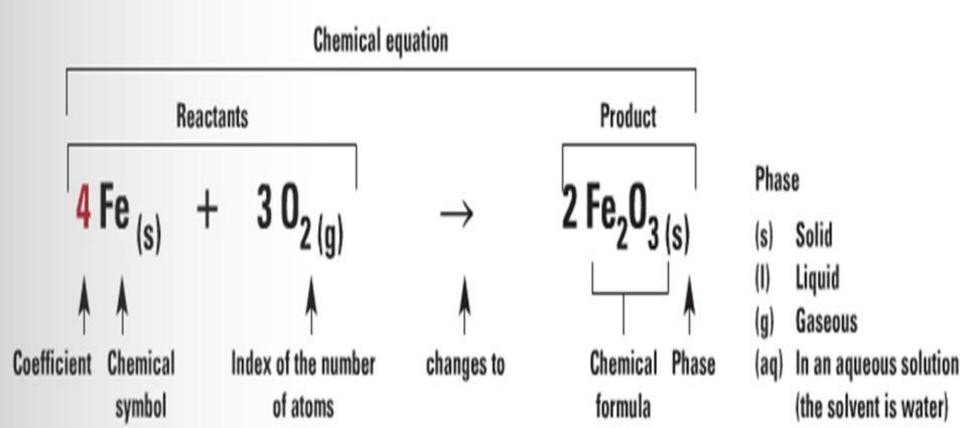
Hydrogen (H)



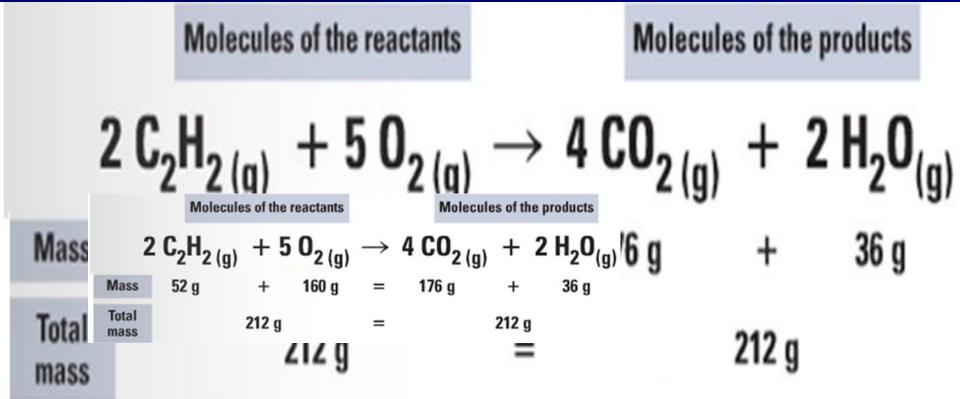
A chemical reaction is a change in which the nature of a substance is altered.



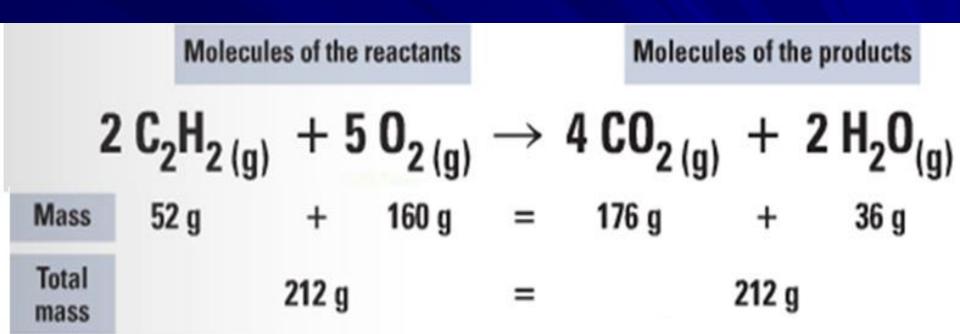
A chemical change, or chemical reaction, can be represented by a chemical equation, which shows how the change took place.



The law of conservation of mass states that in a chemical change the mass of the reactants is equal to the mass of the products.



■ Example: The combustion of acetylene:



■ A chemical reaction could also be represented using the particle model. By drawing the same number of each type of atoms on the reactant and product side, we can show that the law of conservation of mass is respected.