

Chapter 6

Chemical Reactions

Any chemical change in matter which involves transformation into one or more substances with entirely different properties is called a chemical reaction.

Chemical bond is the attractive force that holds the atoms of a molecule together in a compound.

Question

What happens during a chemical reaction ?

Answer

1. A chemical reaction involves breaking of chemical bonds between atoms of reacting substances.
2. Rearrangement of atoms making new bonds to form new substances with absorption or release of energy in the form of heat and light.

Characteristics of chemical reactions

1.Evolution of gas



The formation of gas bubbles in a liquid during a reaction is called *effervescence*

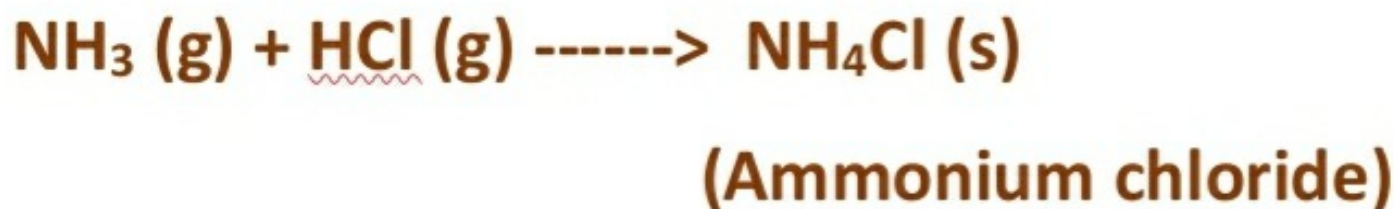
2.Change of colour



3. Formation of precipitate



4. Change of state



5. Change in energy

Examples :

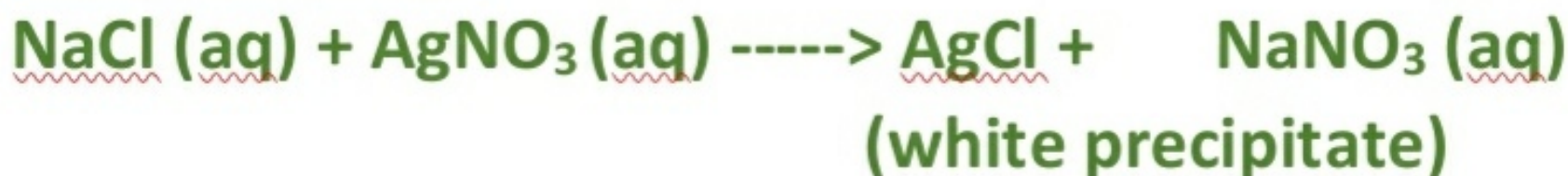
- Burning of fuel :- Energy is released.
- Decomposition of calcium carbonate :- Heat energy is absorbed.

Conditions necessary for chemical reactions

1. Close contact



2. Solution form



3. Heat energy

Heat

