equal rate and attain the equilibrium state. Such reactions are called **reversible reactions.** Many examples of physical and chemical equilibrium are found in nature.

We owe our existence to equilibrium phenomenon taking place in atmosphere. We inhale oxygen and exhale carbon dioxide, while plants consume carbon dioxide and release oxygen. This nature process is responsible for the existence of life on the earth.

Many environmental systems depend for their existence on delicate equilibrium phenomenon. For example, concentration of gases in lake water is governed by the principles of equilibrium. The lives of aquatic plants and animals are indirectly related to concentration of dissolved oxygen in water.

to right	to left
3.At initial stage, the rate of forward reaction is very fast.	3.In the beginning the rate of reverse reactions is negligible.
4.It slows down gradually	4.it speeds up gradually.

Macroscopic Characteristics of Dynamic equilibrium

A few important characteristic features of dynamic equilibrium are given below,

- An equilibrium is achievable inly in a closed system(in which substances can neither leave nor enter
- At equilibrium state a reaction does not stop. Forward and reverse reactions keep on taking place at the same rate but in opposite directions
- At equilibrium state, the amount (concentration) of reactants and products do not change. Even physical properties like colour, density, etc remain the same