

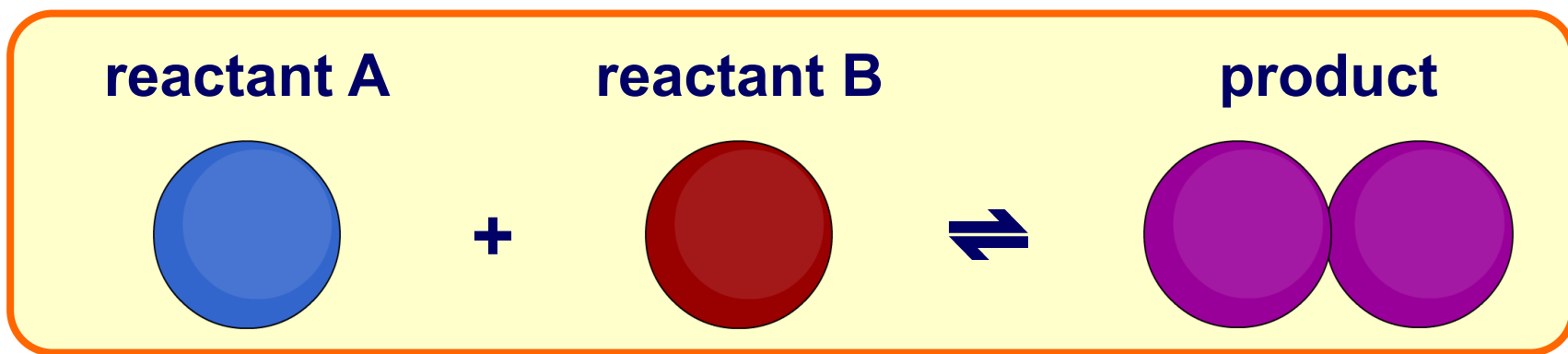
Dynamic Equilibrium



What is dynamic equilibrium?

In some reversible reactions, the forward and backward reactions largely occur in the same conditions and at the same rate.

These reactions are said to be in **dynamic equilibrium** – there is no **overall** change in the amount of products and reactants, even though the reactions are ongoing.



Dynamic equilibrium can only take place in a **closed system**, otherwise the products would escape.



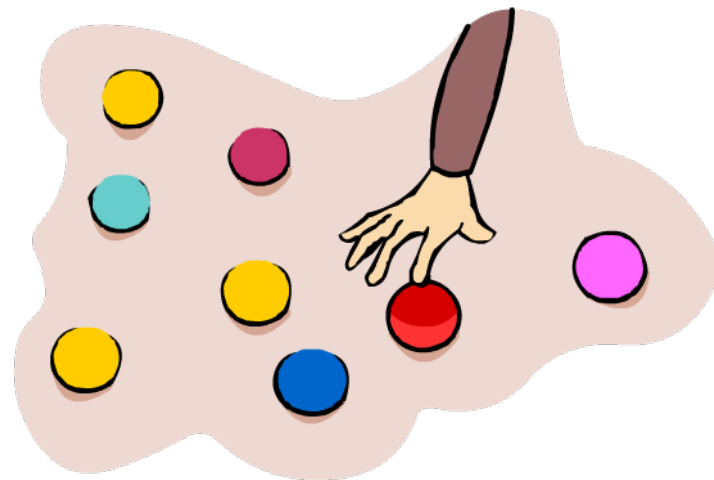
What happens in dynamic equilibrium?

What is special about the forward and backward reactions at dynamic equilibrium?



Setting dynamic equilibrium

The position of dynamic equilibrium is not always at a half-way point, i.e. when there are equal amounts of products and reactants. It may be at a position where there are mainly reactants with a little product, or vice versa.



The position of equilibrium is influenced by two main factors:

- temperature
- concentration (or pressure for reactions involving gases)

Adding a catalyst **speeds up** the time it takes to reach equilibrium, but does not change the **position** of equilibrium.



True or false?

