

IGCSE Chemistry (9-1) Specification 3(c)

(c) Reversible reactions and equilibria

Students should:

3.17 know that some reactions are reversible and this is indicated by the symbol \rightleftharpoons in equations

3.18 describe reversible reactions such as the dehydration of hydrated copper(II) sulfate and the effect of heat on ammonium chloride

3.19C know that a reversible reaction can reach dynamic equilibrium in a sealed container

3.20C know that the characteristics of a reaction at dynamic equilibrium are:

- the forward and reverse reactions occur at the same rate
- the concentrations of reactants and products remain constant

3.21C understand why a catalyst does not affect the position of equilibrium in a reversible reaction

3.22C know the effect of changing either temperature or pressure on the position of equilibrium in a reversible reaction:

- an increase (or decrease) in temperature shifts the position of equilibrium in the direction of the endothermic (or exothermic) reaction
- an increase (or decrease) in pressure shifts the position of equilibrium in the direction that produces fewer (or more) moles of gas

References to Le Chatelier's principle are not required