

Chapter 7 Redox - GCSE Assumed Knowledge

Learning Objectives	Keypoints
Explain redox reactions in terms of transfer of oxygen	Oxidation is the gain of oxygen. Reduction is the loss of oxygen.
Explain redox reactions in terms of transfer of electrons	Oxidation is the loss of electrons. Reduction is the gain of electrons.
Identify oxidising agents and reducing agents	An oxidising agent causes another species to lose electrons, so will gain electrons itself. A reducing agent causes another species to gain electrons, so will lose electrons itself.
Write half equations	A half equation shows either just the oxidation reaction or the reduction reaction. A half equation must be balanced in terms of atoms and charges. The charges are balanced by adding electrons to the most positive side of the equation.
Construct balanced ionic equations	Ionic equations show any ionic compounds split into their ions. A spectator ion is an ion that is exactly the same on the left hand side of the equation as the right hand side. Spectator ions can be removed from the ionic equation to give a net ionic equation.