5.2.3 Redox and electrode potentials

Redox (a) explanation and use of the terms *oxidising agent* and *reducing agent*					
(b) construction of redox equations using half equations and oxidation numbers					
(c) interpretation and prediction of reactions involving electron transfer					
Redox titrations (d) the techniques and procedures used when carrying out redox titrations including those involving Fe^{2+}/MnO_4^- and $I_2/S_2O_3^{2-}$					
(e) structured and non-structured titration calculations, based on experimental results of redox titrations involving: (i) Fe^{2+}/MnO_4^- and $I_2/S_2O_3^{2-}$ (ii) non-familiar redox systems					
Electrode potentials (f) use of the term standard electrode (redox) potential, $E^{\ominus}$ including its measurement using a hydrogen electrode					
(g) the techniques and procedures used for the measurement of cell potentials of: (i) metals or non-metals in contact with their ions in aqueous solution (ii) ions of the same element in different oxidation states in contact with a Pt electrode					
(h) calculation of a standard cell potential by combining two standard electrode potentials					
(i) prediction of the feasibility of a reaction using standard cell potentials and the limitations of such predictions in terms of kinetics and concentration					
Storage and fuel cells (j) application of principles of electrode potentials to modern storage cells					
(k) explanation that a fuel cell uses the energy from the reaction of a fuel with oxygen to create a voltage and the changes that take place at each electrode.					