

Unit 11 – Redox / Equilibrium

C5.3a Describe equilibrium shifts in a chemical system caused by changing conditions (Le Châtelier's Principle).

C5.3a.a I can determine the shift in equilibrium of a chemical reaction by changing the temperature.

C5.3a.b I can predict the shift in equilibrium of a chemical reaction if reactants are applied.

C5.3a.c I can predict the shift in equilibrium of a chemical reaction if products are removed from the system.

C5.3b Predict shifts in a chemical system caused by changing conditions (Le Châtelier's Principle).

C5.3b.a I can identify whether a reaction will favor the forward or reverse reaction based on the stress.

C5.3b.b I can predict shifts in reactions based on change in pressure, heat, and quantity of chemicals added or removed.

C5.3c Predict the extent reactants are converted to products using the value of the equilibrium constant.

C5.6a Balance half-reactions and describe them as oxidations or reductions.

C5.6a.a I can balance a redox equation using half reactions.

C5.6a.b I can label substances oxidized, reduced, and the agents.

C5.6c Explain oxidation occurring when two different metals are in contact.

C5.6d Calculate the voltage for spontaneous redox reactions from the standard reduction potentials.

C5.6e Identify the reactions occurring at the anode and cathode in an electrochemical cell.