Electrolytic Cells

- electrochemical cells which use electricity to produce a chemical change
- use electricity to cause a non-spontaneous redox reaction to occur
- this process is called electrolysis

Quantitative Electrochemistry

The Faraday Constant (F) = 9.65×10^4 C/mol e^-

One farad (F) is the amount of electrical charge possessed by one mole of electrons

96 500 C (coulombs) = 1 mol e^-

1 mol of electrons has a charge of 96 500 coulombs

One coulomb (1 C) is the quantity of electricity produced by one ampere (1 A) flowing for one second (1 s).

$1\ C = 1A \cdot s$

coulomb (C) = **amount** of electrical charge

ampere (A) = **rate of flow** of electrical charge

volt (V) = the **tendency** (potential) of electrons to flow