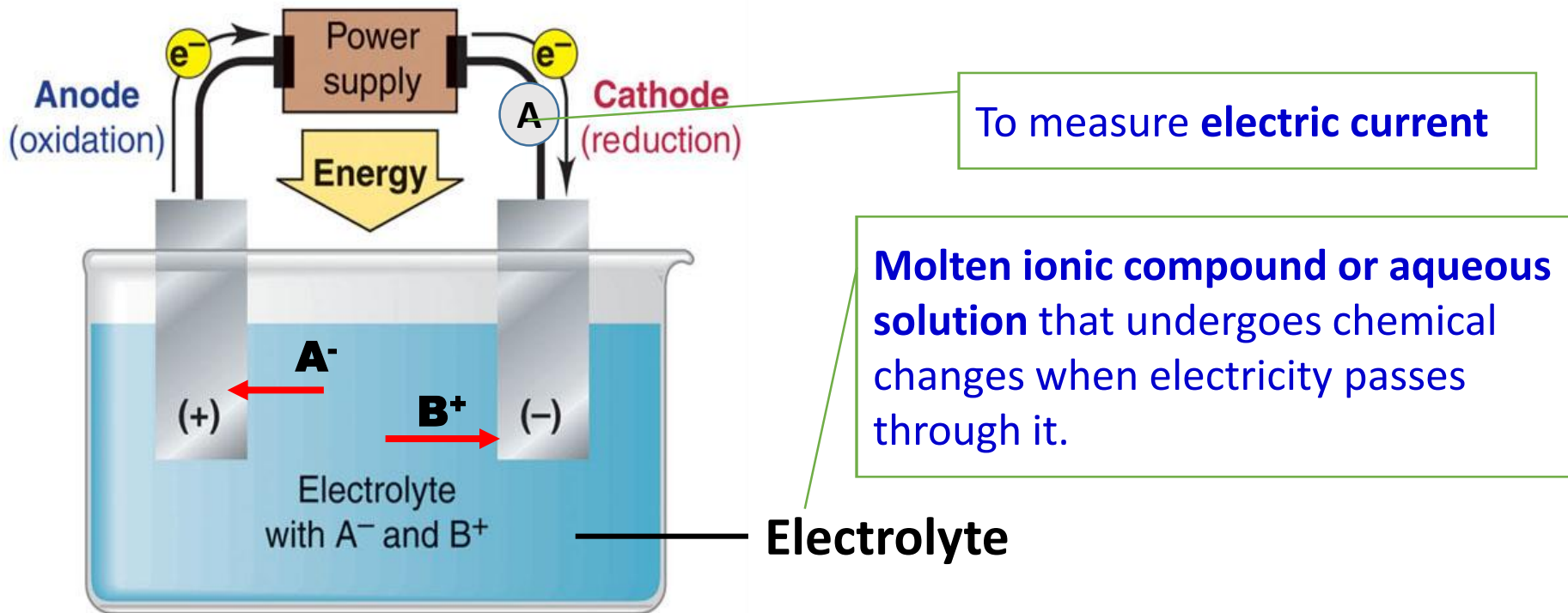


ELECTROLYTIC CELL



Anions are attracted to anode (positive electrode).

Cations are attracted to cathode (negative electrode).

Anions are discharged at anode by losing $e^- \Rightarrow$ Oxidation occurs at anode

Cations are discharged at cathode by gaining $e^- \Rightarrow$ Reduction occurs at cathode

Electrons leave the battery and travel towards cathode.

Electrons return to battery from anode.

- An electrolytic cell is made up of two electrodes immersed in an electrolyte.
- **Electrolysis** is the process occurred in electrolytic cell in which electrical energy is used to cause **non-spontaneous redox reactions** at electrodes.
- Electrolysis involves the breaking down a compound into its constituent elements by passing electricity through it.
- A **direct current** is passed through the electrolytic cell from a power supply such as battery.
- When the cell is in operation, the power supply acts as an 'electron pump', pushing electrons onto the negative electrode (cathode) and removing electrons from the positive electrode (anode).
- Electrodes used are usually **inert electrodes** such as platinum, Pt or graphite, C that **do not take part** in the redox reaction.