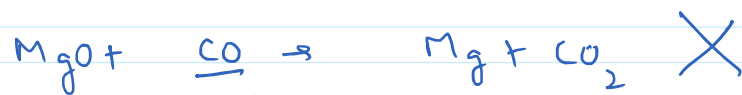


Extraction of metals towards top of the activity series

eg: K, Na, Ca, Mg, Al

These cannot be obtained from their compounds by heating with carbon or any other reducing agent.

Eg: oxides of sodium, magnesium, calcium, aluminium cannot be reduced by carbon as these metals have more affinity for oxygen than carbon.

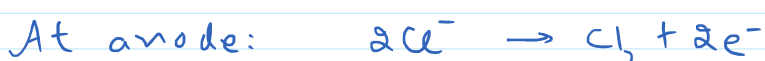
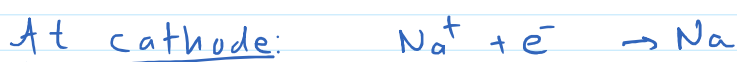


## Electrolysis

Metals high up in activity series are obtained from electrolytic reduction.

eg: Sodium, magnesium and calcium are obtained by the electrolysis of their molten chlorides

The metals are deposited at the cathode (the negatively charged electrode), whereas chlorine is liberated at anode (the positively charged electrode).



Similarly aluminium is obtained by the electrolytic reduction of aluminium oxide.