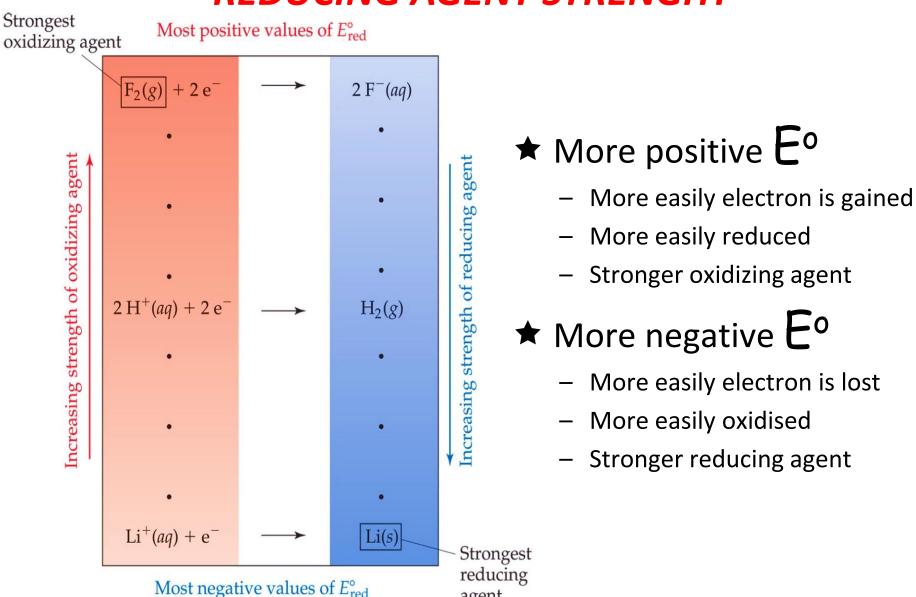
## RELATIVE OXIDISING AND REDUCING AGENT STRENGHT



agent

Oxidising agent

Reduction

 $E^{o}_{red}(V)$ 

Increasing strength of oxidising agent

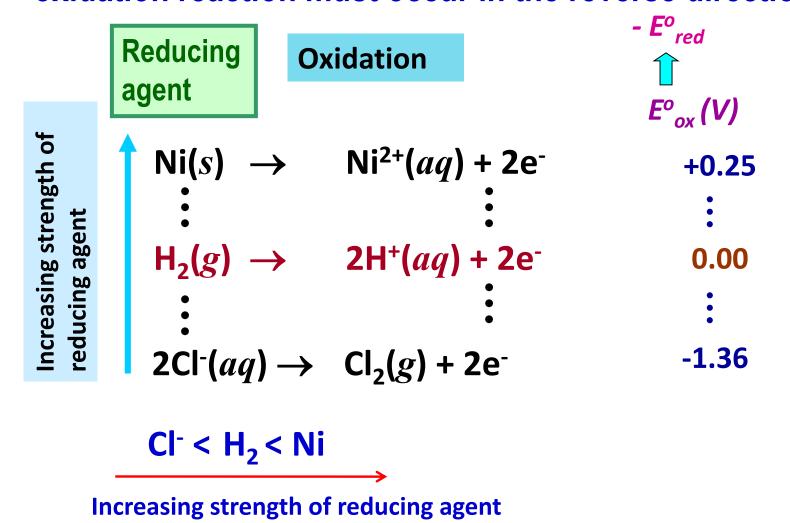
$$Ni^{2+}(aq) + 2e^{-} \rightarrow Ni(s)$$
  
 $\vdots$   
 $2H^{+}(aq) + 2e^{-} \rightarrow H_{2}(g)$   
 $\vdots$   
 $Cl_{2}(g) + 2e^{-} \rightarrow 2Cl^{-}(aq)$ 

$$Ni^{2+} < H^+ < Cl_2$$

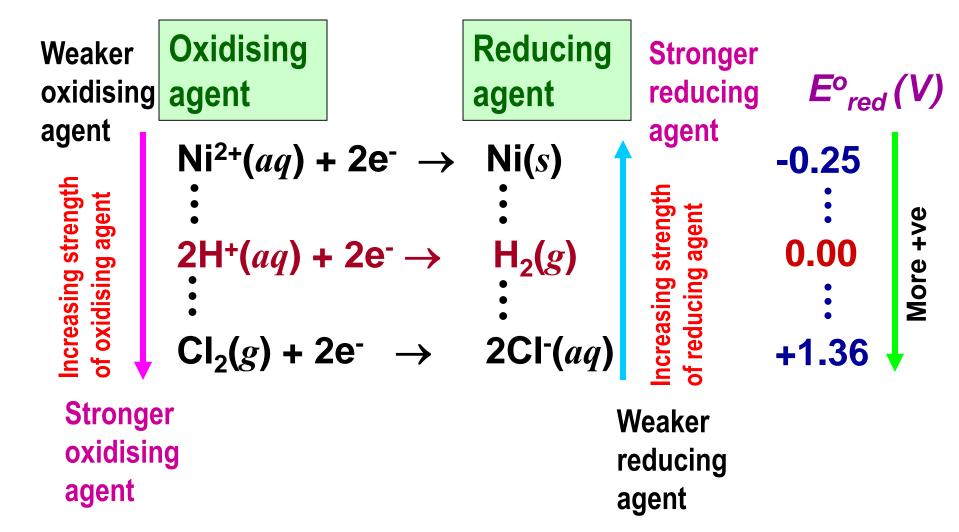
Increasing strength of oxidising agent

The more positive E°<sub>red</sub>, the stronger the oxidising agent.

**Note**: For a reducing agent to supply electrons, the oxidation reaction must occur in the reverse direction.



The more negative E°<sub>red</sub>, the stronger the reducing agent



Based on the list of S.R.P, an oxidising agent (species on the left) that has a larger value of E°<sub>red</sub> will react spontaneously with a reducing agent (species on the right) which has a lower value of E°<sub>red</sub>.