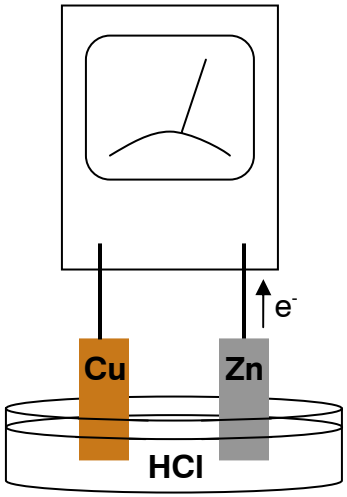
An Electrochemical Cell



Half reactions (H^+ is from $HCl_{aq} \rightarrow H^+_{aq} + Cl^-_{aq}$.):

$$2H^+ + 2e^- \rightarrow H_2 \ (\mathscr{E}^\circ = 0 \text{ V})$$
$$Zn \rightarrow Zn^{2+} + 2e^- \ (\mathscr{E}^\circ = 0.76 \text{ V})$$

Overall reaction:

$$Zn + 2H^+ \rightarrow Zn^{2+} + H_2 \ (\mathscr{E}^\circ_{cell} = 0.76 \text{ V})$$