

# Concentration Cells



oxidation



reduction

$$Q = \frac{[\text{products}]^m}{[\text{reactants}]^n} \Big|_{\text{initial}} = \frac{[\text{Cu}^{2+}]}{[\text{Cu}^{2+}]} = \frac{0.5}{2} = 0.25$$

$$\xi_{\text{cell}} = \xi_{\text{cell}}^\circ - \frac{RT}{nF} \ln Q = 0 - \frac{RT}{2F} \ln .25 = .02 \text{ V}$$