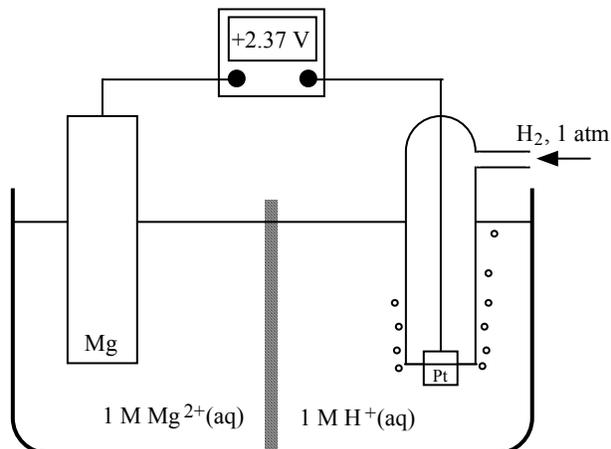


Assignment: Electrochemical Cells

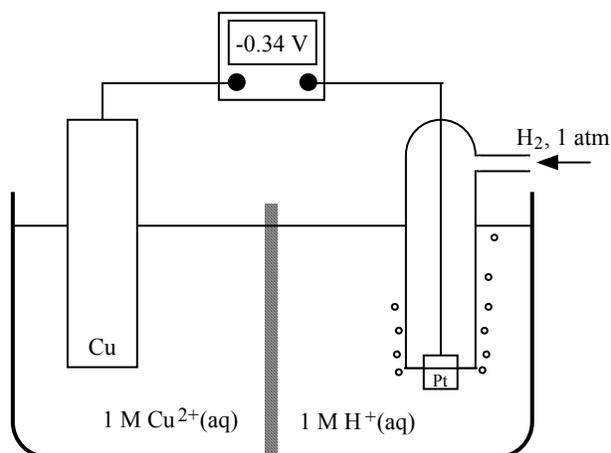
SCH4U _08- 09

The following diagrams of electrochemical cells I and II show the standard reduction potentials for the magnesium and copper metal

Electrochemical Cell: I



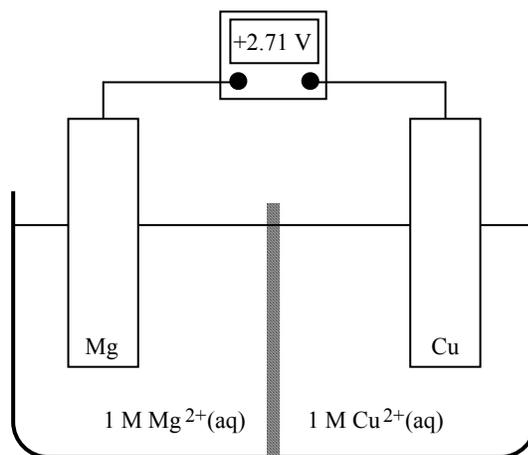
Electrochemical Cell: II



For each of the following **Electrochemical cells A and B** below:

- Write the two half-reactions showing the reduction potential from the Table of Standard Electrode Potentials.
- Write the **two half- cell reactions** that will occur at each electrode.
- State which of the two metals is acting as the anode and the cathode.
- State the polarity of each electrode.
- **Label (with an arrow)** the direction of electron flow in the external circuit of the **diagram**.
- Write the balanced overall reaction for the cell.
- Calculate the standard cell potential.
- Write the **standard cell notation** for the spontaneous reaction occurring in the cell

Electrochemical Cell: A



Electrochemical Cell: B

