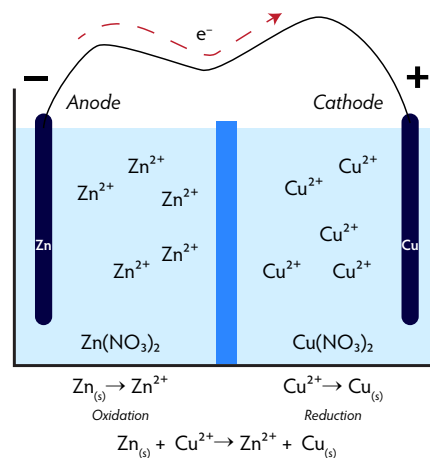


- A battery, or **electrochemical cell**, consists of a reducing and oxidizing agent in separate containers (**half-cells**) connected by a wire and separated by a semipermeable membrane or a salt bridge.
- Each half-cell has a solid strip of metal (an **electrode**) immersed in an aqueous solution of a compound of the same metal.
- Electrons flow through the wire from the oxidizing side (that gives up electrons) to the reducing agent (that grabs them).
 - ▶ The electrode on the oxidizing side is called the **anode**, conventionally labelled with a **minus** sign because it supplies electrons.
 - ▶ The electrode on the reducing side is called the **cathode**, conventionally labelled with a **plus** sign because it receives electrons from the current.
 - ▶ Thus, electrons flow from the anode to the cathode.



Voltage

- The **voltage** of the cell is the difference between the standard reduction potentials of the two half-reactions.
 - ▶ This is *not* affected by coefficients in the balanced redox reaction.

