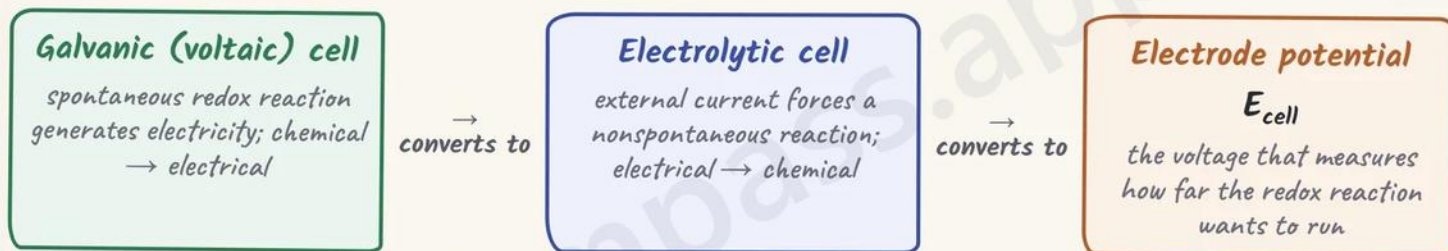


chemical energy and electrical energy, converted both ways, and the cell notation that keeps track of which way current flows



and back: a lead storage cell IS both, a galvanic cell on discharge and an electrolytic cell on recharge

## Electrolytic vs Galvanic Cells \*

### Electrolytic

- nonspontaneous reaction, DRIVEN by external DC current
- electrical energy → chemical energy
- anode (+), cathode (-)

### Galvanic

- spontaneous reaction, PRODUCES current on its own
- chemical energy → electrical energy
- anode (-), cathode (+)

in BOTH cell types: oxidation always happens at the anode, reduction always happens at the cathode. Only the sign of each electrode flips between the two types