Ch. 20 Section 20.9 Electrolytic Cell (Electrolysis)

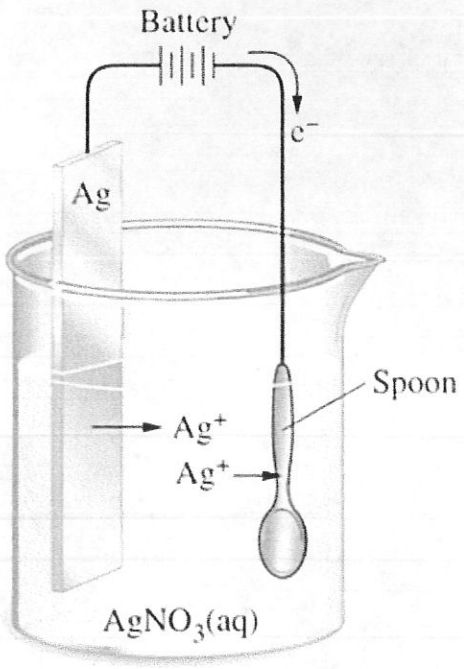
Quantitative Aspect

The External source of energy is the "battery"

Gibbs Free Energy (G) < 0 Voltage (E) >0 K>>)

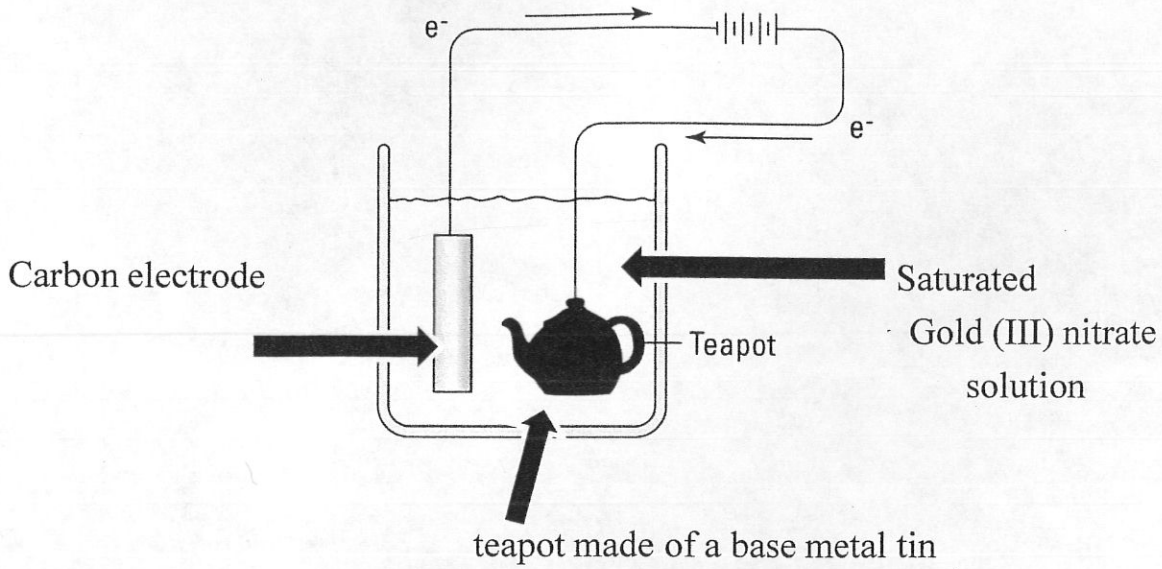
The Electrolytic Cell: The silver plating of the spoon with silver metal

1. Gibbs Free Energy (G) >0 ..supplied from the battery
2. Oxidation and reduction processes are forced



(#1) How much silver metal will be deposited on the tin spoon in 2 hours with a 5 amp current from the battery? (Silver at . wt. = 108)

(#2)



How long (hours) will it take for 1600 milligrams of gold to be plated on the teapot with a current flow of 1.5 amps ? (At wt of gold = 197)
