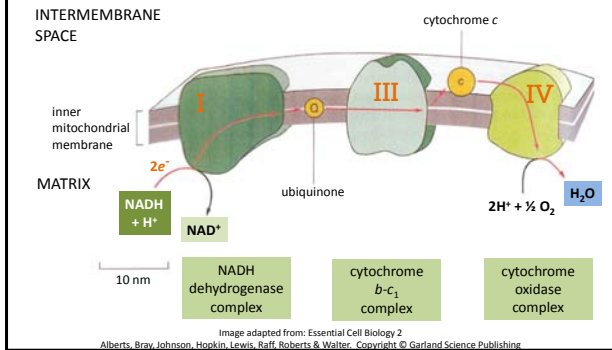
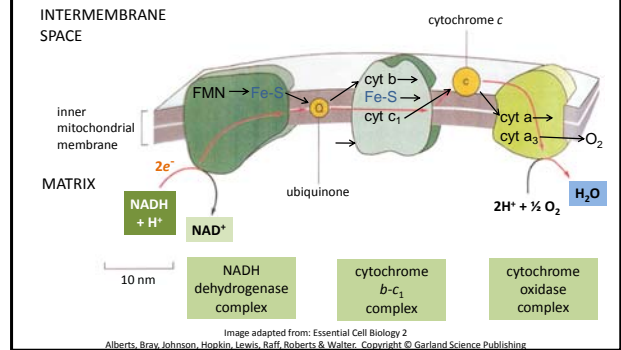


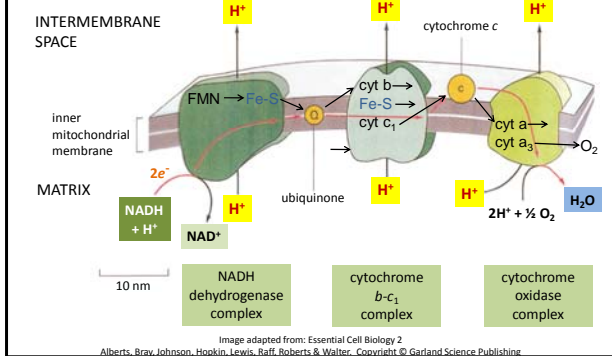
The electron transport chain



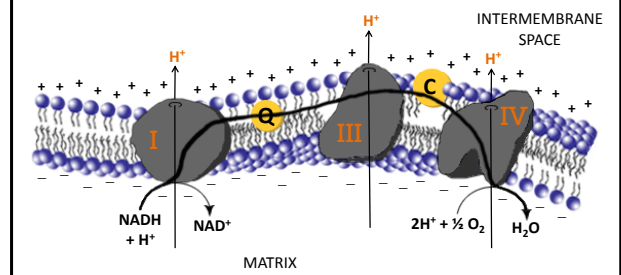
The electron transport chain



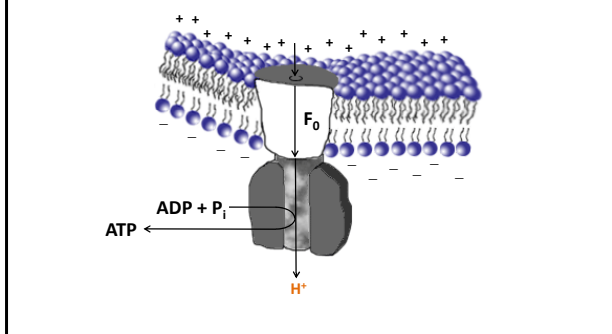
The electron transport chain



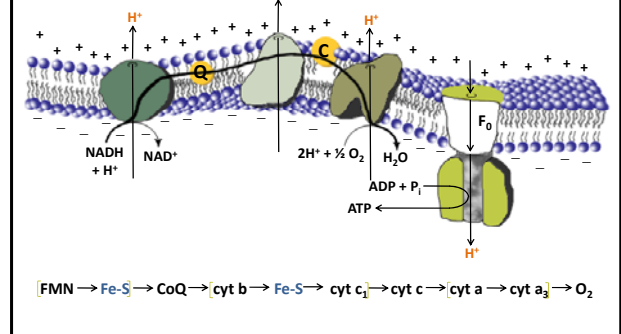
Transfer of protons across the membrane



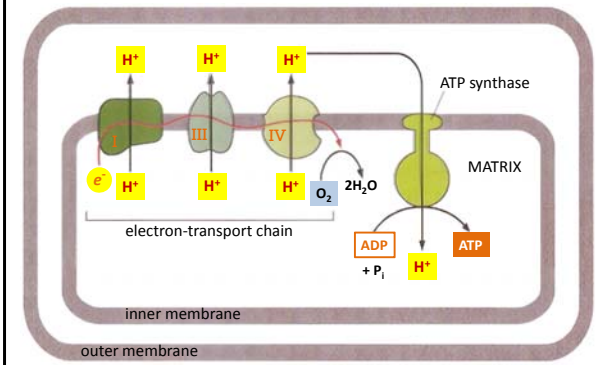
ATP generation



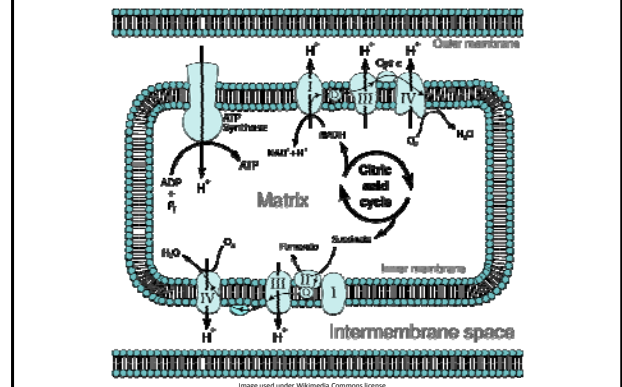
Summary of Electron Transport Chain



Mechanism of ATP synthesis



Flavin Cofactor Reoxidation



Summary of oxidative phosphorylation

ATP yields:	P:O ratios
NADH reoxidised	3 ATP (2.5)
FADH ₂	2 ATP (1.5)

Control:
 increased [ADP] increases rate of O₂ uptake
 increased [ATP] decreases O₂ uptake

Summary of oxidative phosphorylation

Inhibitors	CN ⁻ , rotenone, CO
Uncouplers	dinitrophenol (DNP), thermogenin protein in brown adipose tissue