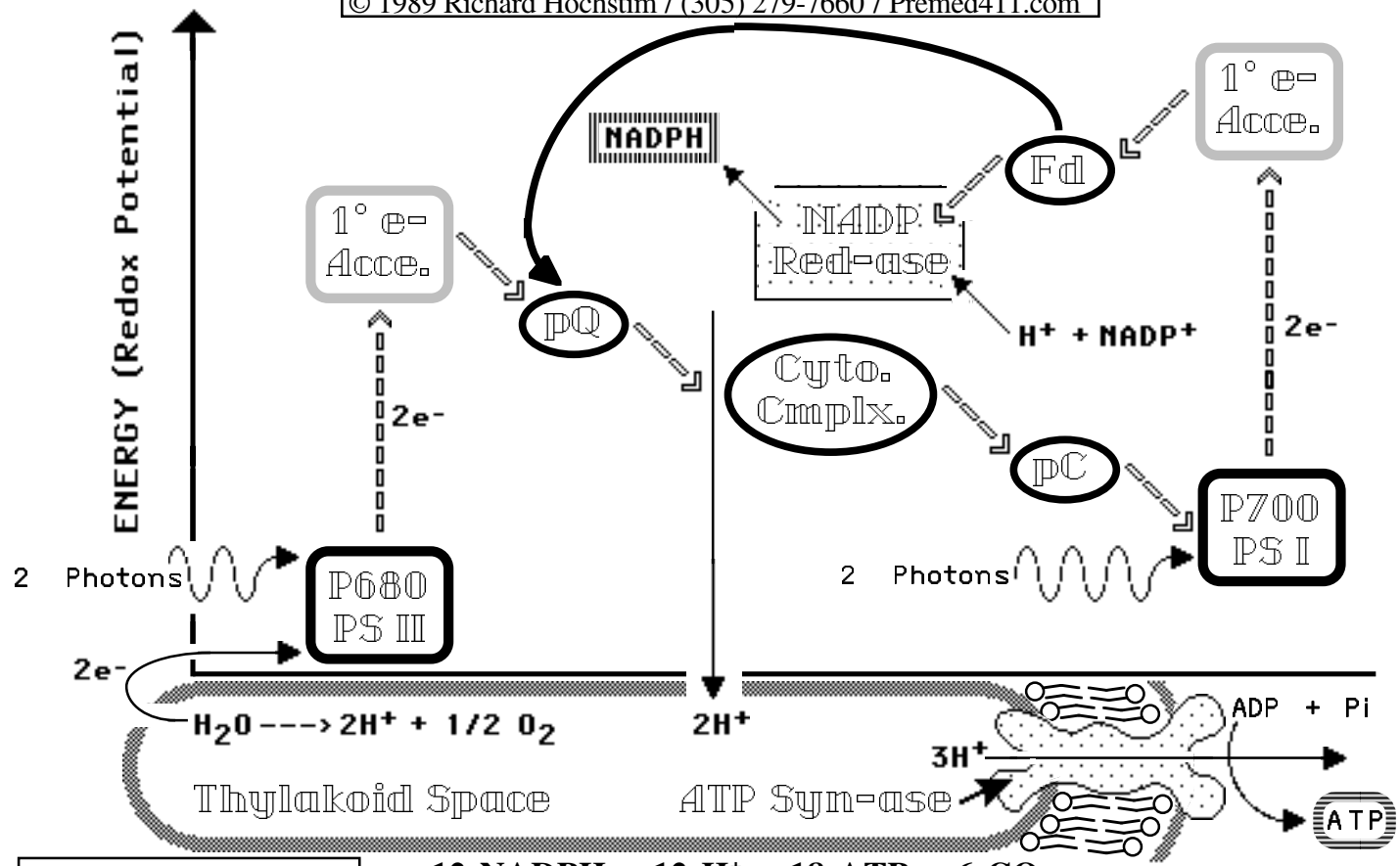
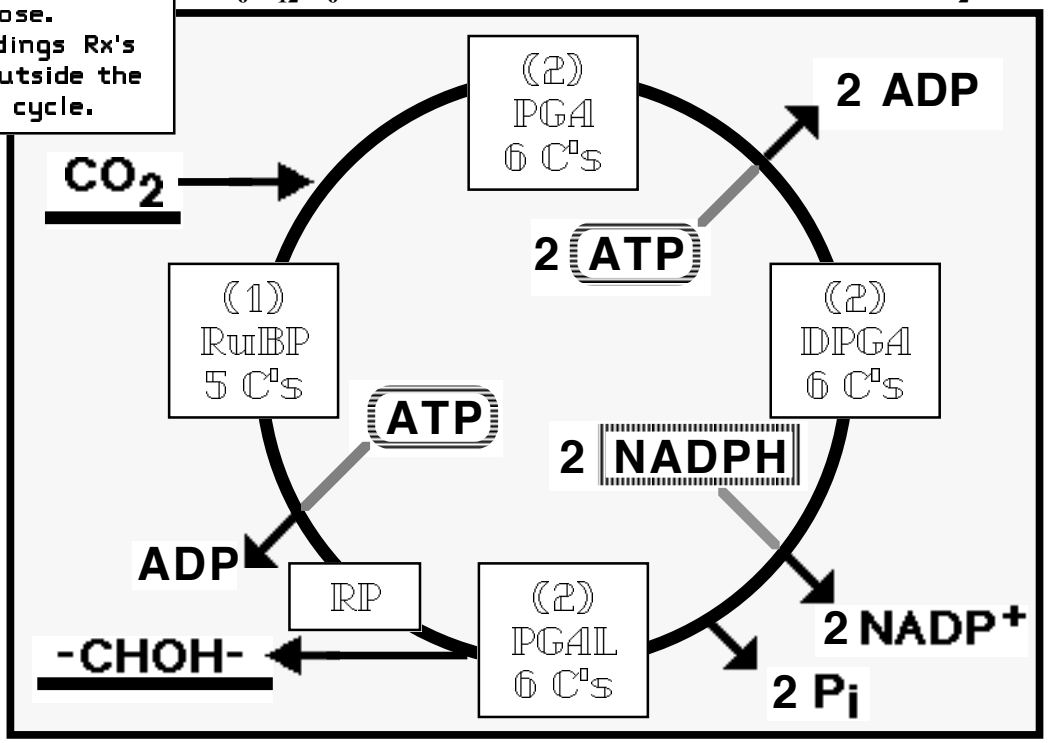
Photosynthesis & Calvin Cycle

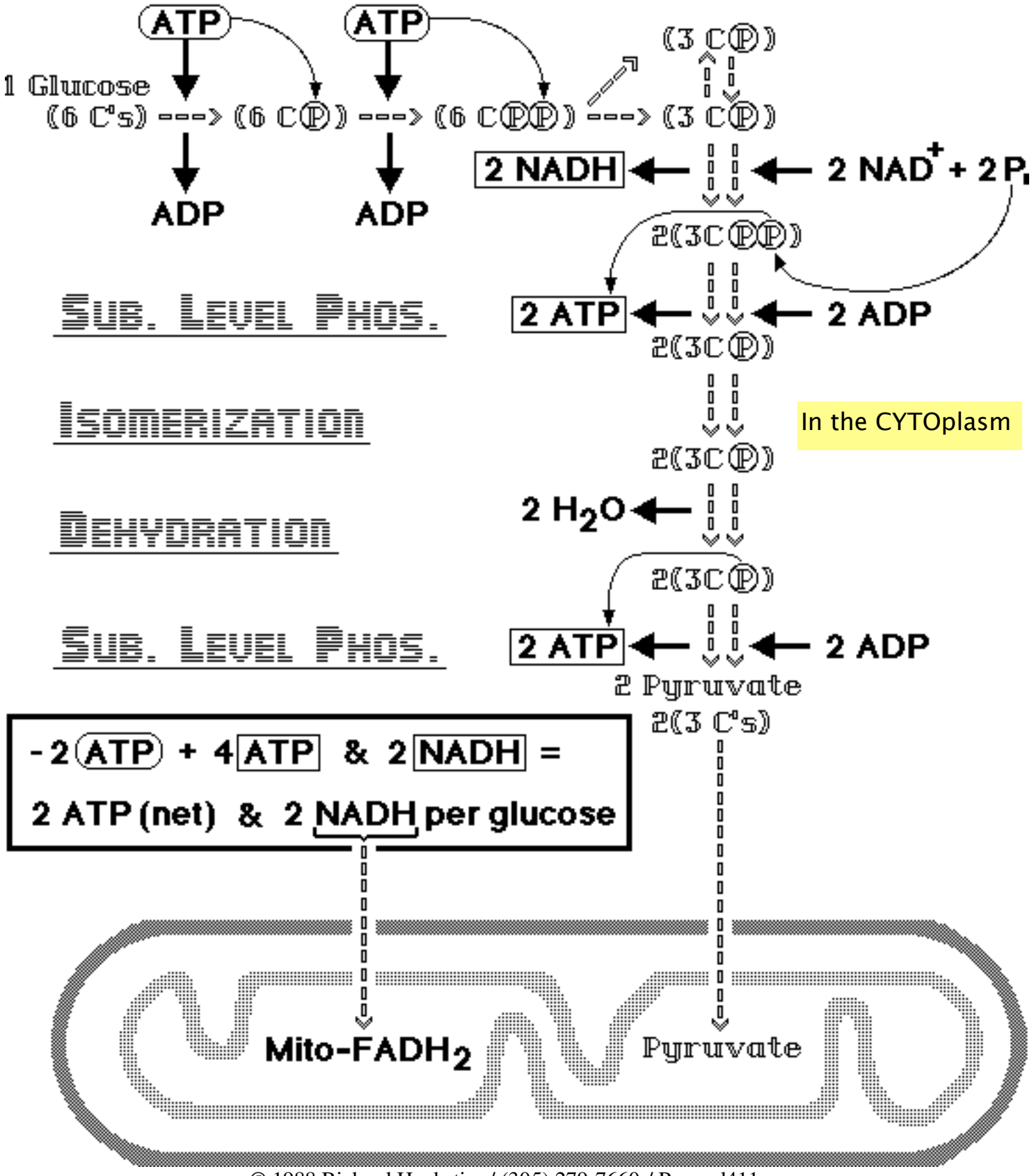


12 NADPH + 12 H^+ + 18 ATP + 6 CO_2 --->
$C_6H_{12}O_6$ + 12 $NADP^+$ + 18 ADP + 18 Pi + 6 H_2O

Net Rx----------> for making 1 mole of glucose. This includings Rx's occuring outside the Calvin cycle.

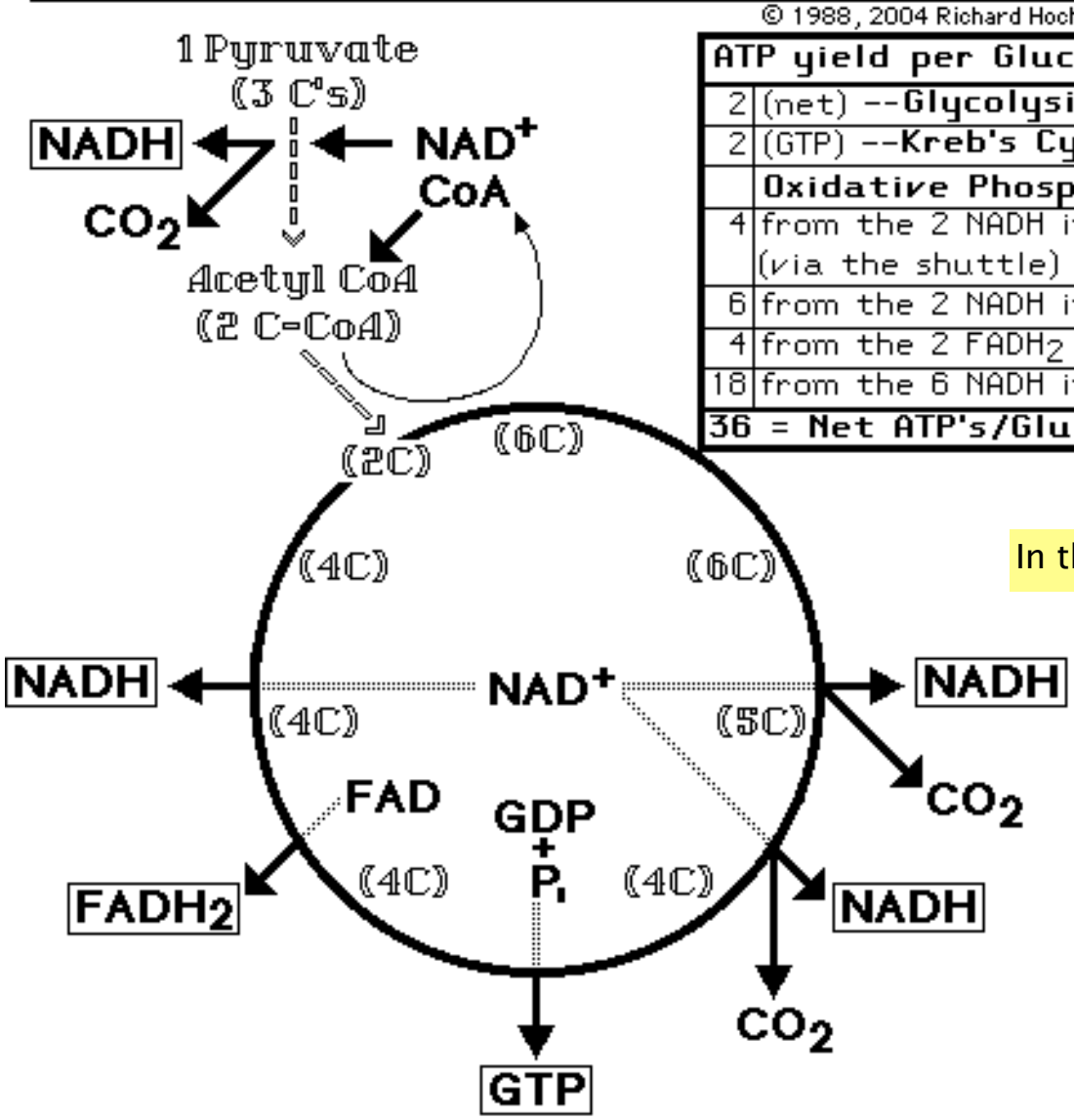


GLYCOLYSIS (in the cytosol)



Decarboxylation of Pyruvate
The Kreb's Cycle
Oxidative Phosphorylation

ATP yield per Glucose	
2	(net) --**Glycolysis**(-2 ATP + 4 ATP)
2	(GTP) --**Kreb's Cycle**
	Oxidative Phosphorylation
4	from the 2 NADH in Glycolysis (via the shuttle)
6	from the 2 NADH in Decarbo. of Pyr.
4	from the 2 $FADH_2$ in Kreb's Cycle
18	from the 6 NADH in Kreb's Cycle
36 = Net ATP's/Glucose	



In the MITO