Use your model and the information in your text to answer the questions below.

1.

a. Where in the chloroplast do the light reactions occur?	thylakoids
b. Where in the chloroplast is the chemiosmotic gradient developed?	thylakoids
c. Where in the chloroplast does the Calvin cycle occur ?	stroma

2. In photosynthesis, the reactions with carbon dioxide to form glucose is carried out in a controlled series of reactions. In general, each step or reaction in the sequence requires the input of energy. The sun is the ultimate source of this energy.

a. What is/are the overall function(s) of the photosystems?	b. What is/are the overall function of the electron transport chain (ETC)?	c. What is/are the overall function(s) of the Calvin cycle?
energized e⁻, H+, NADPH, ATP	actively transport H+ into thylakoids - makes ATP	- H + CO_2 to make $C_6H_{12}O_6$ USING ENERGY FROM ATP + NADPH

3. Are the compounds listed here *"used"*, *"produced"*, or *"not present"* in:	Light dependent reactions?	Light independent reactions?
Glucose	not pres.	prod.
O_2	prod.	not pres.
CO_2	not pres.	used
~~H_2~~ H+	prod.	used
ATP	prod.	used
ADP + P	used	produced
NADPH	prod.	used
$NADP^+$	used	prod.

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