- CO2 is absorbed, and 2. Reduced to a carbohydrate (CH2O) by utilizing ATP and NADPH from the light reactions. The red set of arrows takes ADP + P and NADP+ back to the light reactions where it turns back into ATP and NADPH.
- 20. What are the products of the light reactions? The waste(s)?

Hydrogen ions and the high-energy electrons from chlorophyll will carry on the energy transformation drama after the light reactions are over. The oxygen atoms, however, form oxygen gas, which is a waste product of photosynthesis

21. Use the diagram below to summarize the activities in the light reactions of photosynthesis and the organization of the thylakoid membranes within chloroplasts.



- 22. Describe and explain the overall purpose of the Calvin cycle and each phase listed below:
 - Calvin cycle: consumes ATP as energy to consume NADPH as reducing power for adding high energy electrons to make sugar from

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