Title: Photosynthesis Review

Date: 12-11-12

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| Reactions | Light Dependent Reactions | Calvin Cycle |
| Main Events/ Purpose | To convert the energy from sunlight into chemical energy  (ATP & NADPH) | To use the chemical energy from the light dependent reactions to convert CO2 into glucose |
| Location | Thylakoid membranes | Stroma |
| Reactants | H2O ADP NADP+ | CO2 ATP NADPH |
| Products | O2 H+ +e-  ATP NADPH | Glucose ADP NADP+ |

CO2

1. Carbon Dioxide Fixation
   1. CO2 + RuBP 🡪 6 Carbon molecule
2. Reduction
   1. The 6 Carbon molecule from above is split to form PGA
   2. The energy from ATP and NADPH are used to convert PGA to PGAL

1. Regeneration
   1. 1 PGAL is used to make glucose
   2. 5 PGAL are used to regenerate RuBP

Glucose