# Biology 101 HW 3

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### 1 Draw Reactions

Draw a simple diagram that shows the inputs and out puts of the light dependent and light independent reactions of photosynthesis. Your diagram should show the following: What forms of energy and inorganic molecules go into the light dependent reactions, what is created by the light dependent reactions and where does it go? What goes into the light independent reactions and what are the products? You do NOT need to show the details of the Calvin cycle.

### 2 Reactions in Photosynthesis

Create an outline of the reactions that occur in photosynthesis. Your outline should look like this:

#### 1. Light Dependent Reactions

- Where they occur
  - Photosystem II
    - $\ast$  What does it accomplish
    - \* Brief description of how it does it
  - Photosystem I
    - \* What does it accomplish
    - \* Brief description of how it does it

#### 2. Light Independent Reactions

- Where they occur
  - Calvin Benson Cycle
    - \* What does it accomplish
    - \* Brief description of how it does it

SectionCell Respiration Draw a simple diagram that shows the inputs and out puts of cell respiration. Your diagram should show the following: What molecule enters glycolysis and what molecule is passed from glycolysis to the Krebs cycle, what products of the Krebs cycle are used to fuel chemiosmosis; and how many ATP and electron carriers are produced by each glycolysis, the Krebs cycle and chemiosmosis. You do NOT need to show the details of these stages, just what goes in, what comes out, and what is passed from stage to stage.

## 3 Electron Transport Chain

What is an electron transport chain and why is it useful? (In your own words)