

Internet Wrksht Photosynthesis

**Bookmark: Virtual Cell**

**Address:** <http://www.life.uiuc.edu/plantbio/cell>

Read the directions at the bottom of the first page on how to use this Virtual Cell site Use the Cut and Zoom features to **Diagram and Label all the structures** of the **Chloroplast**.

Photosynthesis Overview

<http://www.biology.ualberta.ca/facilities/multimedia/uploads/alberta/Photo.html>

1. Write the chemical formula for Photosynthesis.

1a. Also, How does the Water and Carbon dioxide enter the plant and How does Oxygen leave the plant?

### Photosynthesis Overview + Light Reaction

Work slowly through the animation click on the numbered parts of the animation individually.

<http://dendro.cnre.vt.edu/forestbiology/photosynthesis.swf>

2. Where in the leaf are the chloroplasts and why do you think they are located there?

### Photosynthesis **Light Reaction** Animation

Compare this animation to the Photosynthesis diagram You picked up today.

<http://highered.mcgraw-hill.com/olcweb/cgi/pluginpop.cgi?it=swf::535::535::/sites/dl/free/0072437316/120072/bio13.swf::Photosynthetic+Electron+Transport+and+ATP+Synthesis>

3. What are the **two energy carrying molecules** that the Light Reaction is making and what is the **one waste molecule**?

### Photosynthesis **Dark Reaction** Animation

[http://www.youtube.com/watch?v=o1I33Dgcc\\_M](http://www.youtube.com/watch?v=o1I33Dgcc_M)

4. What is another name for the Dark Reaction?

5. What molecules provide the energy to run the Dark Reaction?

6. What is the product of one cycle of the Dark Reaction?

7. What happens after two cycles of the Dark Reaction to produce Glucose?

8. What molecule supplies the Carbon for the Dark reaction to occur and how many of them are needed to make one Glucose molecule?

### Photosynthesis Detailed Animation

[http://www.youtube.com/watch?v=hj\\_WKgNL6MI](http://www.youtube.com/watch?v=hj_WKgNL6MI)