Photosynthesis Demos

Directions: Check out the websites that follow to see photosynthesis in action, then answer the questions that follow.


Watch and listen to the tutorial found in the link above. Fill in the following answers as you watch.

1. Plants use photosynthesis to make _______________________________ for the plant.

2. What do plants need in order to perform photosynthesis?

3. How is the plant able to obtain each “ingredient?”

4. Identify the plant cell organelle in which photosynthesis takes place.

5. Summarize the process of photosynthesis. Water and carbon enter the chloroplast.....

6. What happens to the oxygen that is produced as a result of photosynthesis?

7. Why is photosynthesis also important for people and animals?

Check out some more demos
Bubbles are given off by the plant through photosynthesis. By measuring the rate at which the bubbles are produced it is possible to tell how fast the plant is photosynthesizing. Read and follow the directions on how to use this lab simulator. Press start and record the bubbles per minute for each of the following light distances. Then graph your data (be sure to label each axis)!

8. 

<table>
<thead>
<tr>
<th>Light Distance (cm)</th>
<th>Bubbles per minute</th>
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<tbody>
<tr>
<td>100</td>
<td></td>
</tr>
<tr>
<td>120</td>
<td></td>
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<tr>
<td>150</td>
<td></td>
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<tr>
<td>180</td>
<td></td>
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<tr>
<td>200</td>
<td></td>
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</tbody>
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9. Based on your data, draw a conclusion regarding how light intensity affects the rate of photosynthesis.

10. Draw below a picture which shows the overall process of photosynthesis:

11. Write the chemical equation for photosynthesis.

12. Photosynthesis converts _______________ energy into the _______________ energy of sugars and other organic compounds.
13. Which process provides most of the oxygen found in Earth's atmosphere?
   1. photosynthesis
   2. aerobic respiration
   3. dehydration synthesis
   4. fermentation

14.