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1. A) Draw your model of photosynthesis below.

B) Show how your model will be different under the conditions of the experiment. You can either redraw your model here. Or make changes to your original model above using a different color pen/pencil.

2. Include your data from the experiment in the table below.

Photosynthesis and Light Experiment Data Sheet

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | | | |
| Plant receiving light | |  | Plant receiving no light | |
| Time | Water Level |  | Time | Water Level |
| 0 |  |  | 0 |  |
|  |  |  |  |  |
|  |  |  |  |  |

3. Plot the data from your table above on this graph below.

|  |  |  |  |  |  |  |  |  |  |
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1. Write 1-2 sentences explaining what your graph shows.
2. a. Was your prediction confirmed or rejected.

b. Why do you think this is so?

6. Photosynthesis can be affected by many environmental conditions. In this experiment, we have investigated how light and dark conditions affect photosynthesis.

1. Can you think of one more situation/condition where you can use model to make predictions about how photosynthesis will be affected?
2. Can you think of one situation/condition where you ***CANNOT*** use model to make predictions about how photosynthesis will be affected? (Note: this is called a limitation of a model).
3. Why do you think models have limitations?

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student No. \_\_\_\_\_\_\_\_\_\_\_



**Checking for Understanding: PHOTOSYNTHESIS**

\_\_\_ 1. Which of the following is **NOT** an input or output of photosynthesis?

A. Carbon dioxide C. Water

B. Oxygen D. Temperature

\_\_\_ 2. If photosynthesis stopped today, the earth would still have enough oxygen for animals to survive indefinitely.

A. True B. False

Explain your answer.

3. List two variables could you change if you wanted to increase the rate of photosynthesis.

4. Why did it take so long for oxygen levels to increase on earth?