Name: _____ Date: _____

How Does Light Affect Photosynthesis

Go to www.biologybynapier.com , Cell Energy Unit page and scroll down to the Light & Photosynthesis link. Or type http://www.reading.ac.uk/virtualexperiments/ves/preloader-photosynthesis-full.html in the address bar.

Click **Instructions** and read the information. Click **Start** to begin.

Read the instructions. Make sure you have reset your clock and counter before each trial.

To analyze the effect of light on photosynthesis, you will calculate the rate of photosynthesis at different light intensities.

Start with the light 100 cm away from the plant. Run a total of 3 trials. Test again at 130 cm and 190 cm. Run 3 trials for each.

Bubbles per Minute (BPM)	100cm distance	130cm distance	190cm distance
Trial 1			
Trial 2			
Trial 3			
Average BPM			

Questions:

1. What happened as the light was moved further away?

2. Why were bubbles counted to calculate the rate of photosynthesis?

3. What product of photosynthesis was observable?

4. What was your BPM (Bubbles per minute) reading for each distance –
   a. 100 cm? _____
   b. 130 cm? _____
   c. 190 cm? _____

5. What are the reactants of photosynthesis?

6. What are the products of photosynthesis?

Question: How does light distance affect the rate of photosynthesis?

Claim *An answer to the question* ***based on the data. Answer in a complete sentence.***
Evidence *Summary of the data or observations (I^2).* ***What data supports your claim?***
Reasoning *Explanation based on the evidence to support your claim.* ***Explain each piece of evidence with a reason.***