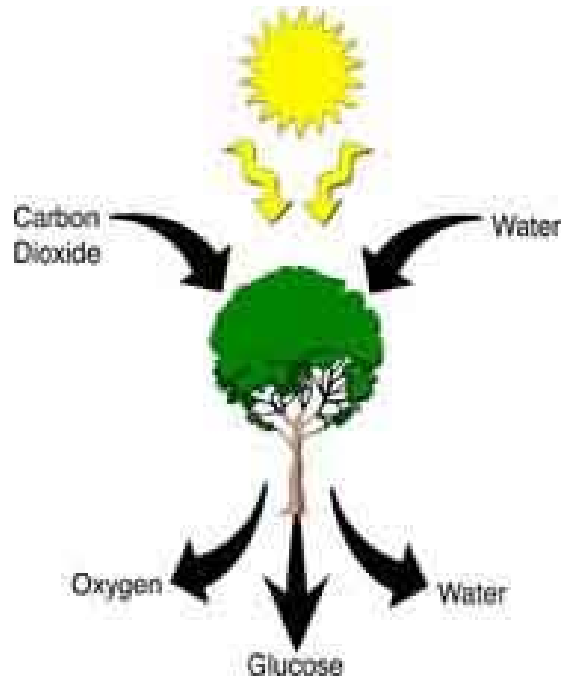


## MiSP Photosynthesis Assessment L3

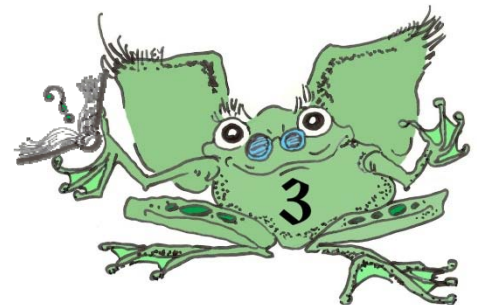
Name \_\_\_\_\_

Date \_\_\_\_\_

Questions 1–5: True or false. For each statement, indicate whether it is true or false in the space. If it is false, correct the statement to make it true by changing the underlined words. You may use this diagram to help you with some of the answers.

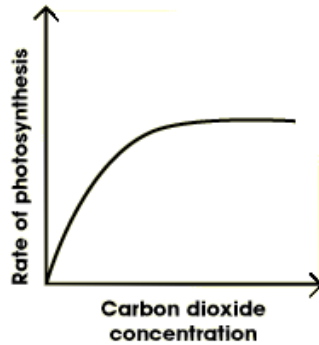


1. \_\_\_\_\_ Plants need carbon dioxide and water for photosynthesis.
2. \_\_\_\_\_ Plants are able to photosynthesize in the light and dark.
3. \_\_\_\_\_ Plants release oxygen as a product of photosynthesis.



4. \_\_\_\_\_ Plants make food during photosynthesis.
5. \_\_\_\_\_ In addition to photosynthesis, plants carry out cellular respiration where they use oxygen to break down food to release energy needed for life. Respiration occurs only at night.

Answer the remaining question(s) on the basis of the graph below, which shows the rate of photosynthesis in a plant when it is given increasing concentrations of carbon dioxide.



6. Describe the graph by completing this sentence: *As the concentration of carbon dioxide (amount of carbon dioxide) increases, the rate of photosynthesis*

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7. The rate of photosynthesis does not continue to increase indefinitely as the carbon dioxide concentration increases. Why?

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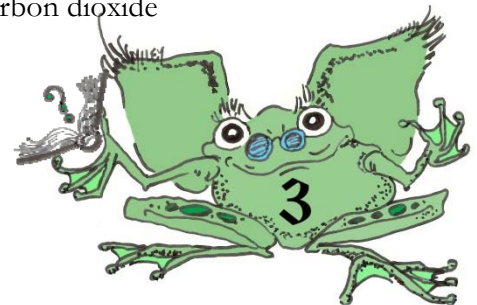


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8. What is the unit rate of change in the rate of photosynthesis when the carbon dioxide concentration is high? \_\_\_\_\_



9. How does the numerical value of the unit rate of change in the rate of photosynthesis at the beginning of the graph compare to the rate of change at the end of the graph?

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10. \_\_\_\_\_ Which of these line formulas could be the formula for the beginning of the carbon dioxide concentration and rate of photosynthesis graph?

a.  $y = -4x + 0$

b.  $y = 4x + 0$

c.  $y = 4$

d.  $x = 4$

