

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. One hundred samples of living plant tissues were placed in each of four sealed containers of equal volume. The amount of CO<sub>2</sub> present in each of the containers was 250 cubic centimeters. The data table shows the color of light and the temperature that each container was exposed to. The amount of CO<sub>2</sub> remaining in each container at the end of 2 days is also shown in the table. Assume that any experimental conditions not listed are identical in all four containers.

**Data Table**

Container	Plant	Plant Part	Light Color	Temp. (°C)	CO <sub>2</sub> Present After 2 Days (cm <sup>3</sup> )
1	myrtle	leaf	red	15	100
2	myrtle	leaf	red	27	50
3	oak	root	blue	27	300
4	oak	leaf	orange	27	150

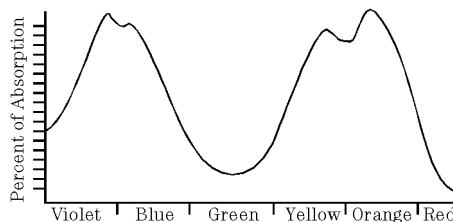
In which container was photosynthesis most likely taking place at the fastest rate?

- A. 1      B. 2      C. 3      D. 4

2. A gas resulting from aerobic respiration is released into water. Which substance could be used to indicate a change in the water due to the release of the gas?

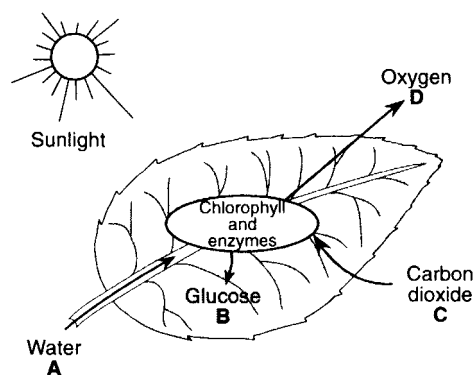
- A. bromthymol blue      B. Benedict's solution  
 C. iodine solution      D. methylene blue

3. The graph shown represents the absorption spectrum of chlorophyll. The graph indicates that the energy used in photosynthesis is most likely obtained from which regions of the spectrum?



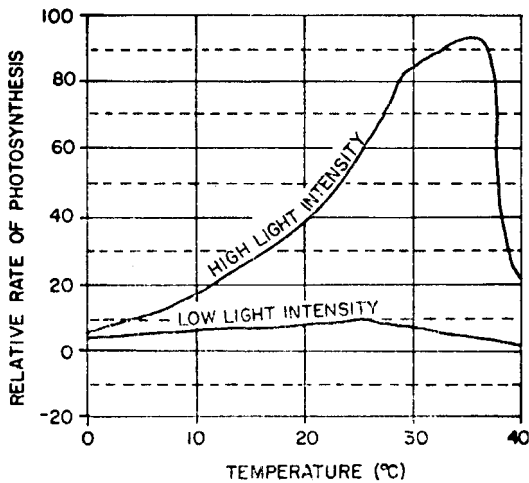
- A. yellow and orange red  
 B. violet blue and green  
 C. orange red and violet blue  
 D. green and yellow

4. The diagram represents some processes occurring in the leaf of a plant. Which letters indicate substances needed by the leaf to carry out the process of aerobic cellular respiration?



- A. A and C      B. C and D  
 C. B and C      D. B and D

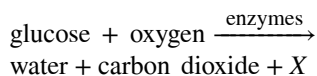
5. The graph shown relates the rate of photosynthesis in a geranium plants to varying conditions of temperature and light intensity.



At a low light intensity, an increase in temperature will

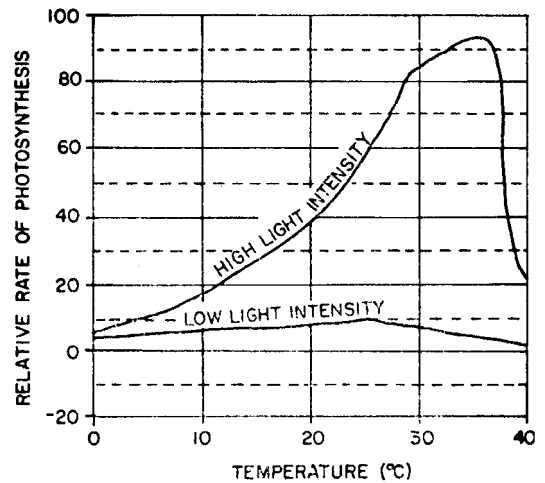
- A. greatly slow down the rate of photosynthesis
- B. greatly speed up the rate of photosynthesis
- C. have little effect on the rate of photosynthesis
- D. have no effect on the rate of photosynthesis

6. What is represented by X in the summary equation for aerobic respiration shown?



- A. ATP
- B. ADP
- C. lactic acid
- D. ethyl alcohol

7. The graph shown relates the rate of photosynthesis in a geranium plants to varying conditions of temperature and light intensity.



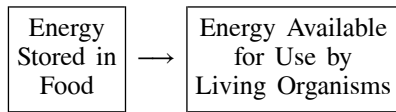
The relative rate of photosynthesis is greatest under which conditions of light intensity and temperature?

- A. low light intensity at 25°C
- B. low light intensity at 35°C
- C. high light intensity at 25°C
- D. high light intensity at 35°C

8. Aerobic cellular respiration requires an adequate supply of

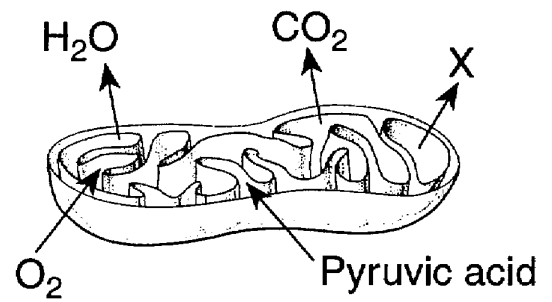
- A. oxygen
- B. carbon dioxide
- C. ethyl alcohol
- D. starch

9. Which process is represented by the arrow in the diagram?



- A. growth
- B. respiration
- C. regulation
- D. excretion

10. All the arrows are associated with the process of



- A. carbon fixation
- B. photochemical reaction
- C. anaerobic respiration
- D. aerobic respiration

p/s, cr quiz 01/12/2016

1.  
Answer: B
2.  
Answer: A
3.  
Answer: C
4.  
Answer: D
5.  
Answer: C
6.  
Answer: A
7.  
Answer: D
8.  
Answer: A
9.  
Answer: B
10.  
Answer: D