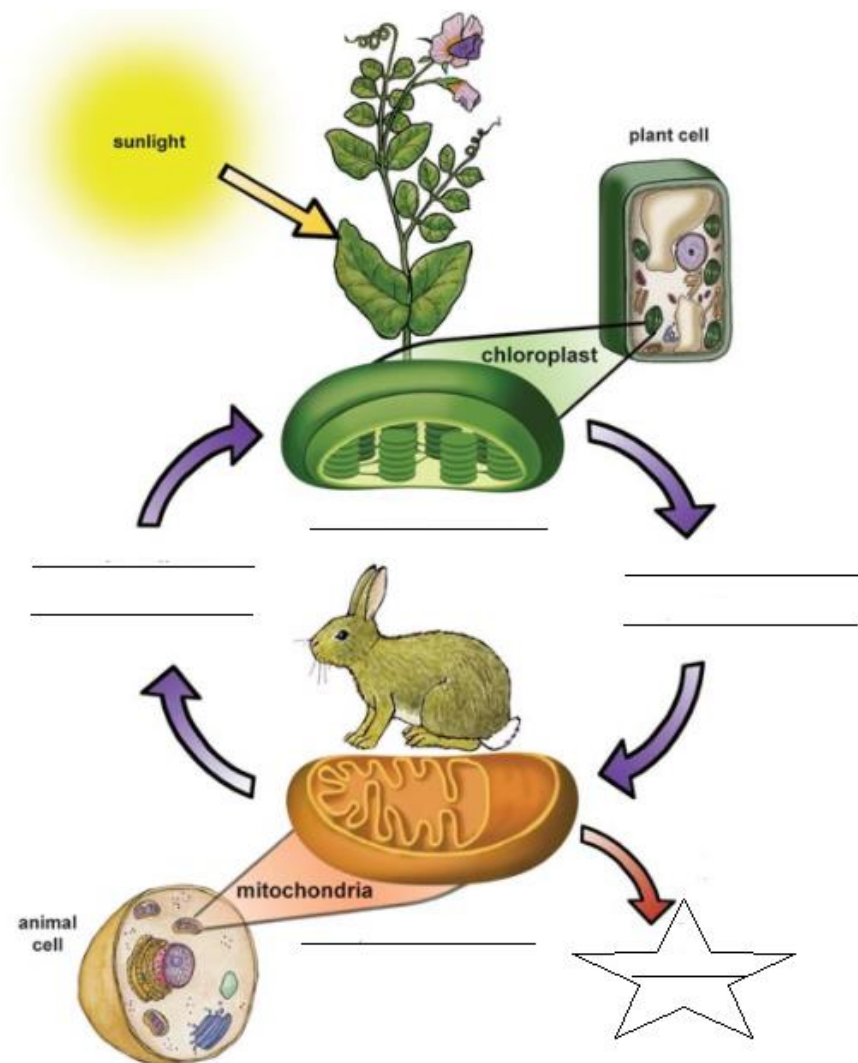


Name: _____ Per: _____ Date: _____

Photosynthesis & Respiration Test Review

Flashcards: https://quizlet.com/_4cimfd

1. Fill-in the following model using the word bank.



Wordbank: Cellular respiration, ATP, Carbon dioxide, Glucose, Oxygen, Water, Photosynthesis

2. Using the diagram above, write out the formulas for Photosynthesis and Respiration. Label the Reactants and the Products

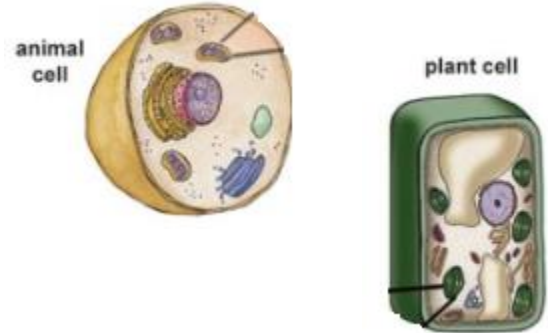
Photosynthesis:

Respiration:

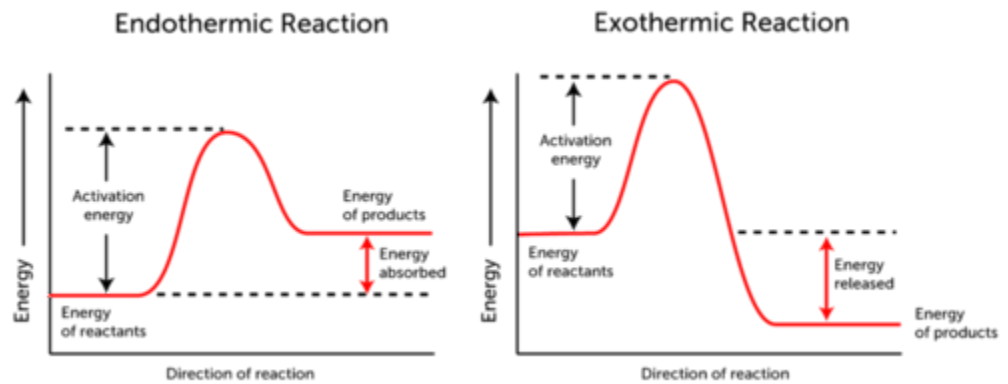
3. What is the reactant/substrate for Photosynthesis that is also a product of Cellular Respiration?

4. Which factors may slow down [photosynthesis](#)? [Respiration](#)?

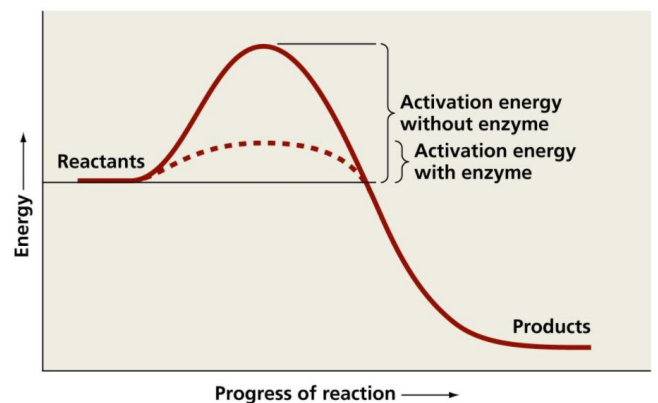
5. Which processes are performed by each cell? Explain.



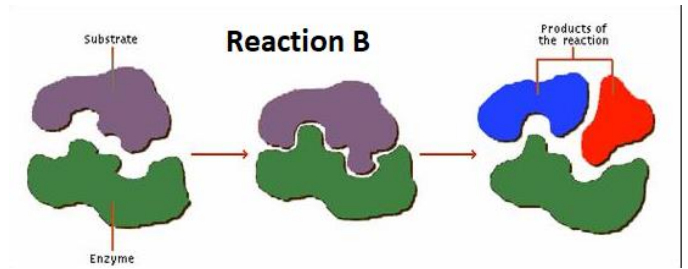
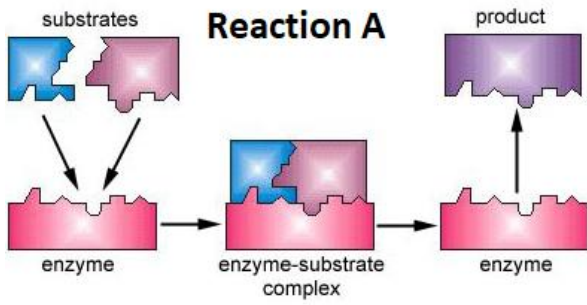
6. Which of the [reaction graphs](#) below represent [photosynthesis](#) and which represents cellular [respiration](#)? How do you know?



7. What is the definition of [Activation energy](#)? How do enzymes affect activation energy?



8. Which reaction is a [LYSIS](#) reaction? [SYNTHESIS](#)? Exothermic? Endothermic? Explain.



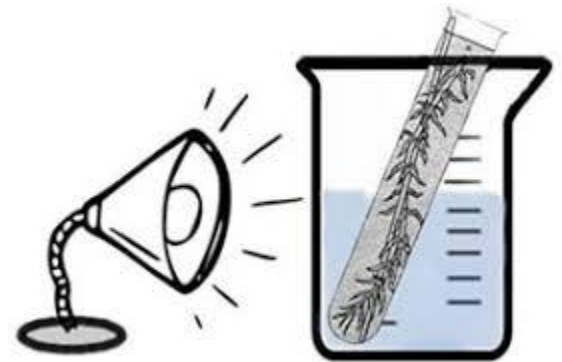
9. Describe the experimental design of the [photosynthesis lab](#).

IV _____

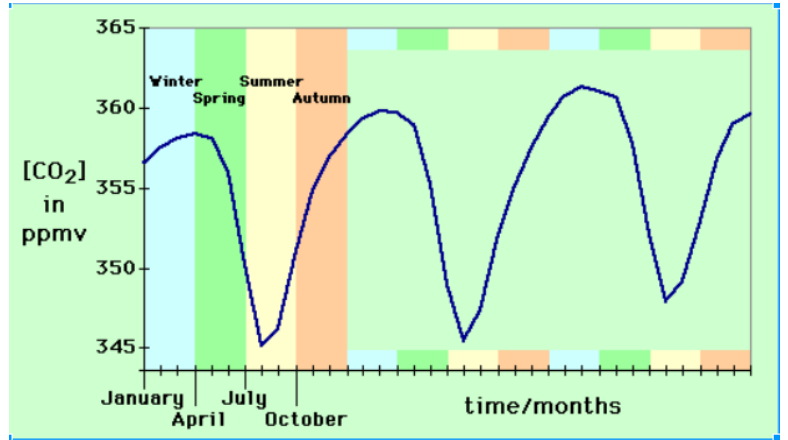
DV _____

Constants _____

Control Group _____



10. What happens to the levels of Carbon Dioxide over time (during [different seasons](#))? Why?



11. Name and define each [sphere of the earth](#) [BLAH]

B

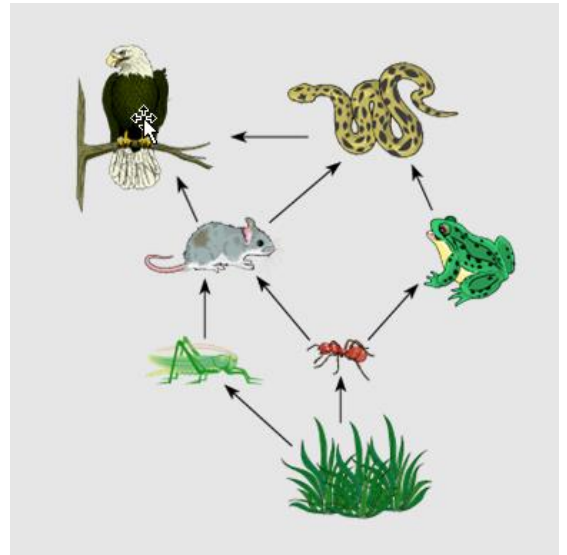
L

A

H

12. Increased global warming changes weather wind patterns. Increased evaporation over oceans carry clouds to areas over land leading to flooding. Flooding may then lead to mudslides and habitat destruction for plants and animals in an ecosystem. [Track the flow](#) of carbon through the earth's spheres from these events.

13. Label the parts of the [food chain](#) with the feeding levels.
 (primary consumer, producers, tertiary consumer, apex predator, secondary consumer)



12. What happens to the [amount of energy](#) as you go up the food chain? Where is the most energy? The least? How might this impact an ecosystem?

Directions. Fill in the correct letter after you've identified the correct structure. Then write the correct name of the [structure](#) on the line below. All letters will not be used.

___ 13. These "columnar" cells are responsible for capturing the light that strikes a plant's leaves.

NAME: _____

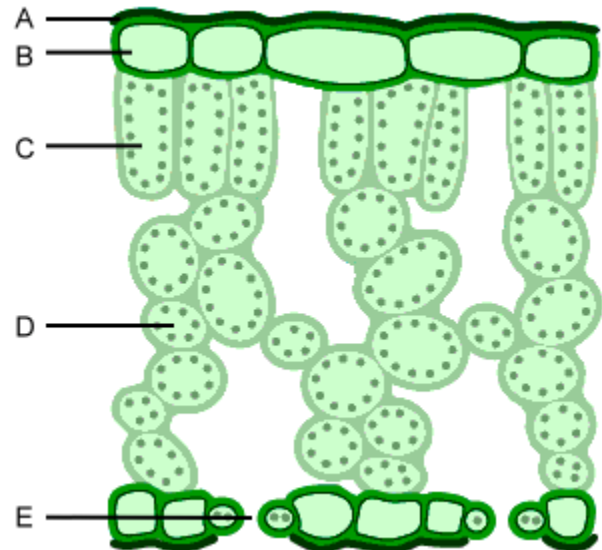
___ 14. These "middle leaf" cells allow gases to easily pass through the leaf due to the air spaces between them.

NAME: _____

___ 15. This waxy layer protects the leaf from being damaged by getting too much sun.

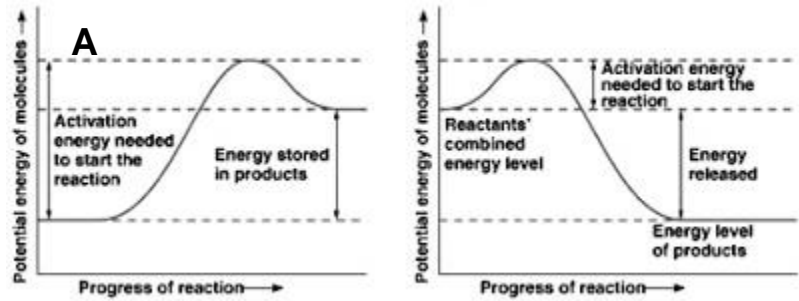
NAME: _____

___ 16a. This structure and all of its parts controls all gases coming into and out of the leaf.



NAME: _____ 16b. What is the name of the pair of cells that border the opening of this structure? _____.

17a. Explain why there is a different activation energy seen between the two energy graphs to the right.



17b. The graph that would represent photosynthesis is graph _____ and the one that would represent cellular respiration is _____. I can tell this because....

18. The compounds that pass through this structure are (circle all that apply)

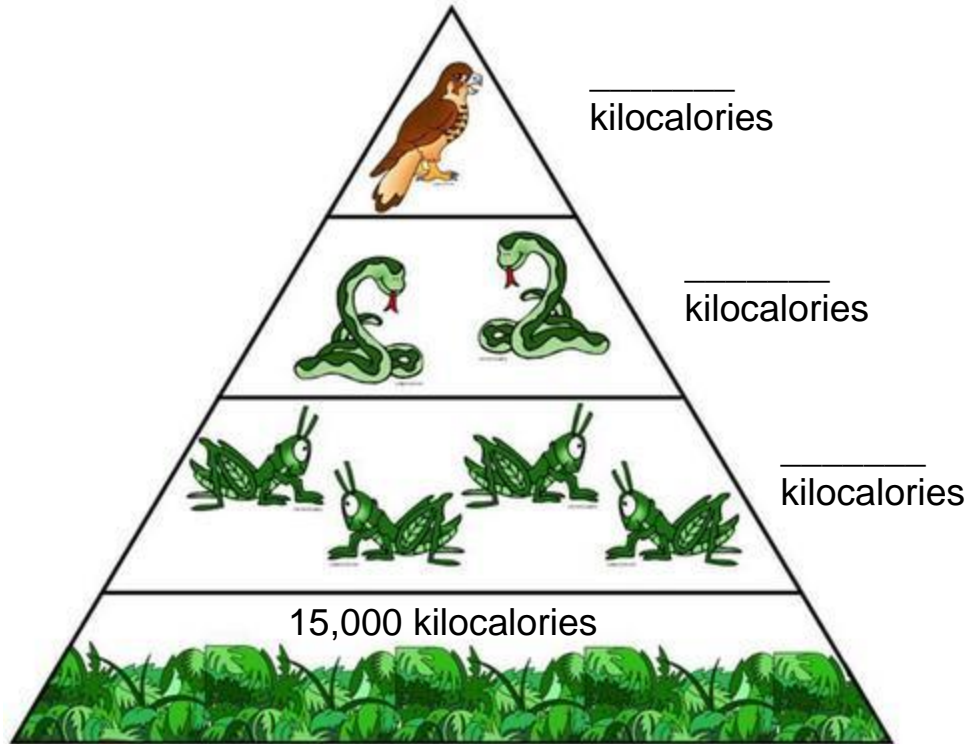
C₆H₁₂O₆ CO₂

H₂O ATP

O₂



19. There is a [trophic pyramid](#) to the right. The producers at the lowest level have 15,000 kilocalories of energy within their structures that the grasshoppers consume. How much energy does the first order heterotrophs, second order heterotroph snakes, and third order heterotrophs receive. Do math below and write answer on lines to the right.



20. What molecule is not present in [lactic acid or alcoholic fermentation](#)? _____

21. With anaerobic respiration occurring **in your muscles**, NADH uses this molecule as its terminal electron acceptor? _____ (OUCH!!!)

22. CO₂ is only formed in this form of fermentation, bread loves it... _____