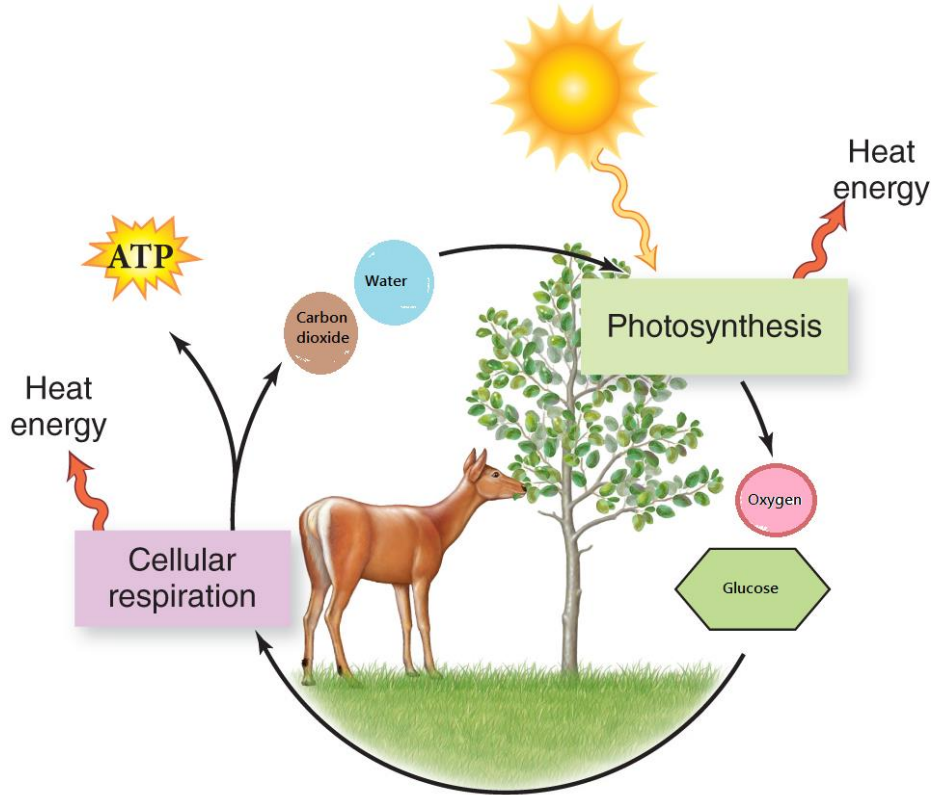


1. All organisms require energy. What is this energy used for?
2. What is the ultimate source of energy on Earth? Why?
3. Distinguish between an autotroph and a heterotroph.
4. Write the equation for photosynthesis.
5. Where do the light reactions of photosynthesis take place? \_\_\_\_\_
6. Diagram a chloroplast below and label its parts.
7. What is chlorophyll? Why is it green? What is its function?
8. Summarize what occurs during the Calvin Cycle.
9. What is the source of oxygen (an atmospheric byproduct) produced during photosynthesis?
10. Which color wavelength is not absorbed by chlorophyll? \_\_\_\_\_
11. Why do the cells of roots lack chloroplasts?
12. Write the equation for cellular respiration.

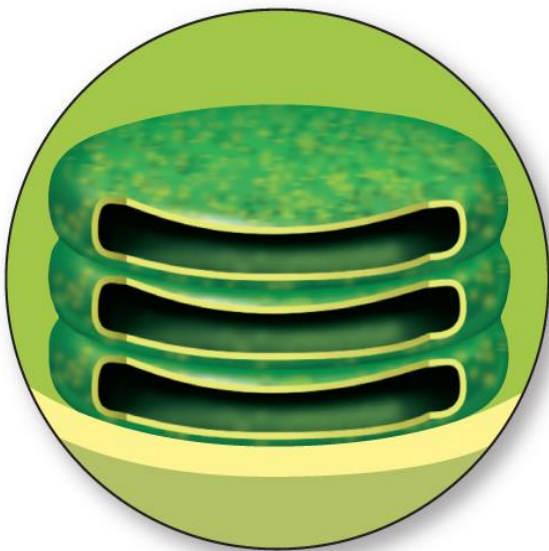
13. Cell respiration is the process by which all / some (circle your choice) organisms release energy stored in organic molecules (glucose) to power cell activities.
14. The energy produced during cell respiration is temporarily stored as \_\_\_\_\_ and some is lost as \_\_\_\_\_ .
15. How is energy release from ATP?
16. What 2 stages follow glycolysis if oxygen is present? \_\_\_\_\_ and \_\_\_\_\_
17. Cell respiration is an aerobic process. What does this mean? \_\_\_\_\_
18. Where does glycolysis occur? \_\_\_\_\_
19. Where does eukaryotic aerobic respiration occur? \_\_\_\_\_
20. What process causes bread to rise and is also used to make beer and wine?
21. During strenuous exercise, when oxygen levels drop, \_\_\_\_\_ can be produced causing muscle pain and cramping.
22. The formation of \_\_\_\_\_ \_\_\_\_\_ converts milk into yogurt and sour cream.
23. How are photosynthesis and cellular respiration almost opposite processes?

24. Based on this diagram, what are the products of cellular respiration? Photosynthesis?

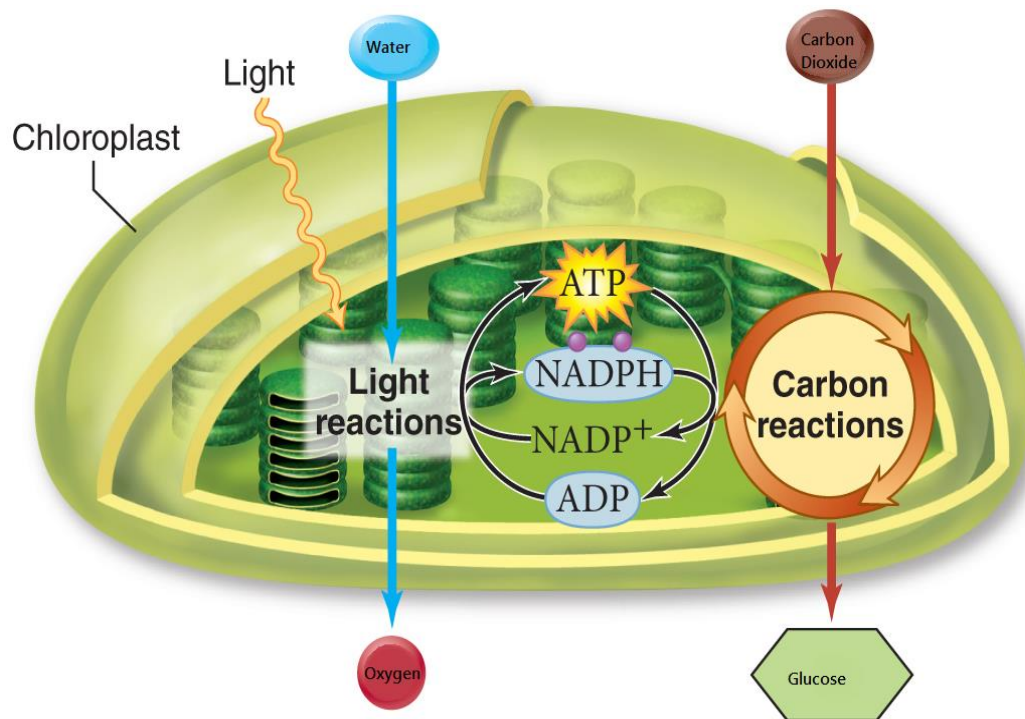


25. Look at the image below and answer the following questions:

- What is each individual disk called?
- What is the stack of disks called?
- Where is this structure found?
- What process happens here?



26. Look at the diagram below. What process is taking place? What organelle is shown? What molecule is split to make oxygen? What is another name for "Carbon reactions"?



27. Look at the diagram below: What occurs in boxes A, B, & C? How much ATP do each of them produce? What process is taking place? What organelle is shown?

