

YOU MUST HAND WRITE THESE ANSWERS!

1. What is a photoautotroph?
2. What is a chemoheterotroph?
3. Write out the chemical equation for photosynthesis.
4. In the eukaryotic cell, where does photosynthesis occur? \_\_\_\_\_
5. In the chloroplast, where does the light reactions occur? \_\_\_\_\_
6. In the chloroplast, where does the light-independent reactions occur? \_\_\_\_\_
7. Can the light-independent reactions occur in the dark? \_\_\_\_\_
8. Give the reason for question #7.
9. What is a photon?
10. What is a pigment?
11. What is the main pigment in photosynthesis? \_\_\_\_\_
12. What are photosystems?
13. In photosystem II, what is the electron donor? \_\_\_\_\_
14. In the electron transport chain in photosynthesis, what is the final electron acceptor? \_\_\_\_\_
15. What is produced during the light dependent reactions that is needed for the light-independent reactions?  
\_\_\_\_\_ and \_\_\_\_\_
16. Light-independent reactions (aka Calvin Cycle) - what are the 3 steps?

17. How many turns of the Calvin cycle does it take to make 1 molecule of glucose? \_\_\_\_\_
18. What is rubisco?
19. In order to help your understanding of photosynthesis, use my photosynthesis diagram to draw your own.