

Name: _____

Period: _____

Photosynthesis Review (Section 19)

1. What are the 3 phases of photosynthesis? (19.3)
 - a.
 - b.
 - c.

2. What is the difference between the light reactions and the dark reactions (Calvin cycle)

3. Where in the cell do the light reactions occur? (19.2-19.3)

4. Where in the cell does the Calvin Cycle occur? (19.5)

5. When are sugars formed during photosynthesis?

6. Which phase of photosynthesis produces ATP & NADPH?

7. Which phase of photosynthesis produces O₂ gas?

8. What do photosystem I and photosystem II have to do with sunlight, chlorophyll and electrons?

9. In which phase of photosynthesis is CO₂ used to create sugar?

10. How is the Calvin Cycle similar to the Krebs Cycle from cellular respiration?

11. Why are plants green? Make sure you use the words, reflect and absorb in your answer.

12. How do the following environmental conditions affect the rate of photosynthesis?

a. Increasing light?

b. Increasing temperature?

c. Low levels of CO₂

d. High Levels of O₂

Vocabulary - Define their role in photosynthesis

1. ATP

2. Autotroph

3. Calvin Cycle

4. Chemical energy

5. Chlorophyll

6. Chloroplast

7. CO₂

8. Energy

9. Glucose

10. Light reactions

11. O₂

12. Photosystems I and II

13. Pigment

14. Sunlight