Name: [redacted]
Hr: 1

Photosynthesis Questions (L.T # 2-12)

1. Define photosynthesis.
The way plants make their own energy using Sunlight

2. Write the equation for photosynthesis. Label the reactants and the products, also include the required materials.
$CO_2 + H_2O + Sunlight = C_6H_{12}O_6 + O_2$
carbon dioxide / water / glucose / oxygen

3. What plant pigments are involved in photosynthesis?
[redacted] Chlorophylls + Carotenoids

4. What are the two types of chlorophylls found in a plant? Which one is directly involved in photosynthesis? Chlorophyll A and B. A is directly involved in photosynthesis.

5. Explain why chlorophyll appears green to us?
Because chlorophyll B reflects green Light

6. How does the amount of energy in light change as the wavelength increases?
As light increases the more photosynthesis

7. Give two additional pigments found in plants.
Carotenoid C

8. In what organelle of the plant does photosynthesis take place?
Chloroplasts

9. Name the two stages of photosynthesis.
light reactions and the calvin cycle.

10. In what part of the chloroplast does each stage take place?
light reactions - Chlorophyll
Calvin cycle - Stroma

11. Which reactant is broken down during the light reactions?
Sunlight

12. Name the ~~three~~ two products of the light reactions.
ATP, NADPH, + O_2

13. Which of these products is a waste material? How does it leave the plant?
oxygen. It leaves through the calvin cycle.

14. Which of the products of the light reactions are used in the Calvin Cycle?
ATP + NADPH