Chapter 10: Photosynthesize ME!

Name:

Match the Following.

1. Autotrophs E. Stomata I. NADP+ M. Light reaction
2. Photosynthesis F. Photons J. Photosystem II N. Heterotrophs
3. Calvin cycle G. Thylakoid K. Photosystem I O. Stroma
4. Chlorophyll H. NADPH L. Respiration
5. Absorbs wavelength of 700nm (P700).
6. Functions first in light reaction.
7. Absorbs light energy and drives synthesis of organic molecules.
8. Formation of a sugar from CO2, ATP, and NADPH.
9. Light energy →Transfer of electron from chlorophyll a → primary electron acceptor.
10. **6 CO2 + 12 H2O + Light energy** → **C6H12O6 + 6 O2 + 6 H2O .**
11. From question #6. Identify the reducing agent
    1. Water
    2. CO2
    3. O2
    4. Sugar molecule
12. From question #6, Identify the molecule that has lost electrons
    1. Water
    2. CO2
    3. O2
    4. Sugar molecule
13. An organism capable of synthesizing its own food from inorganic substances, using light or chemical energy.
14. Product of light reaction after splitting of water and production of ATP.
15. Site for Calvin cycle.
16. Oxidation of glucose.
17. Which of the following is the light NOT used by plants to drive photosynthesis?
    1. Red light
    2. Blue light
    3. Green Light
    4. Violet
    5. A & B only
18. The [quantum](http://en.wikipedia.org/wiki/Quantum) of the [electromagnetic interaction](http://en.wikipedia.org/wiki/Electromagnetic_interaction) and the basic unit of [light](http://en.wikipedia.org/wiki/Light) and all other forms of [electromagnetic radiation](http://en.wikipedia.org/wiki/Electromagnetic_radiation).