

Name _____

Pd _____

Date _____

Biology

Photosynthesis Rap Questions

Photosynthesis let's get into this discussion of sunlight and transformational energy.

1. Photosynthesis means to _____ using _____ energy.
2. Plants take in 6 _____ + 6 _____ + light energy to make glucose and 6 O₂.
3. The oxygen we breathe comes from plants from _____.
4. During photosynthesis, _____ energy is converted to _____ energy.
5. Photosynthesis occurs in the _____ of autotrophic eukaryotes.
6. Photosynthesis is divided into two main stages the _____ reaction and dark reaction.
7. During the light reaction, light energy is captured by pigments in _____.
8. When exposed to light, photosystems (clusters of light absorbing pigments) lose _____ and create an electrical current.
9. The photosystems are found in the inner membrane of the chloroplast called the _____ membrane.
10. At the end of the light reaction, _____ and NADPH (both fully charged batteries) are produced along with O₂ from the splitting of water.
11. The chemical batteries produced during the light reaction (ATP & NADPH) are used in the second stage of photosynthesis called the _____ or the dark reaction.
12. During the Calvin Cycle (Dark reaction), the energy stored in ATP and NADPH are used to fix _____ from the air into simple sugars with the help of an enzyme called RUBP.
13. Collectively photosynthesis occurs on the organ called a _____.
14. The food produced during photosynthesis provides the plant with a source of energy it needs to produce _____ via cellular respiration.
15. Heterotrophs then can eat plants to get the energy they need to survive by breaking down their food with oxygen in a process called _____ to make ATP.

16.-18. Use the following terms: **light energy**, **cellular respiration**, and **photosynthesis** in the diagram below.

