## Golenberke Biology Chapter 8 Vocabulary: Photosynthesis



## Across

2. saclike photosynthetic membranes found inside chloroplasts.
3. cluster of proteins that spans the membrane of a thylakoid and allows $\mathrm{H}+$ ions to pass generating ATP (2)
4. cluster of chlorophyll and proteins found in the thylakoid membranes and are essential to the light-dependent reactions.
5. organisms that obtain food by consuming other living things; also called a consumer
6. carrier molecule that transfers high-energy electrons from chlorophyll to other molecules
7. process used by plants and other autotrophs to capture light energy and use it to power chemical reactions that convert carbon dioxide and water into oxygen and energy-rich carbohydrates such as sugars and starches.
8. fluid portion of the chloroplast, outside of the thylakoids.
9. light absorbing molecules.
10. the light absorbing molecule found in plants and other photosynthetic organisms.
11. set of reactions in photosynthesis that do not require light; energy from ATP and NADPH is used to build high-energy compounds such as sugar; also called the Calvin cycle (3)

## Down

1. a series of electron carrier proteins that shuttle high-energy electrons during ATP-generating reactions (3)
2. first set of reactions in photosynthesis that require the direct involvement of light and light-absorbing pigments and produces ATP and NADPH (3)
3. organism that is able to capture energy from sunlight or chemicals and use it to produce its own food from inorganic compounds; also called a producer
4. (Adenosine Triphosphate) compound used by cells to store and release energy
5. light-independent reactions of photosynthesis in which energy that ATP and NADPH is used to build stable high-energy compounds such as sugar (2)

## WORD BANK

ATP
ATPsynthase
autotroph
Calvin cycle
chlorophyll
electrontransportchain
heterotroph
lightdependentreactions
lightindependentreactions
NADP+
photosynthesis
photosystem
pigment
stroma
thylakoid

