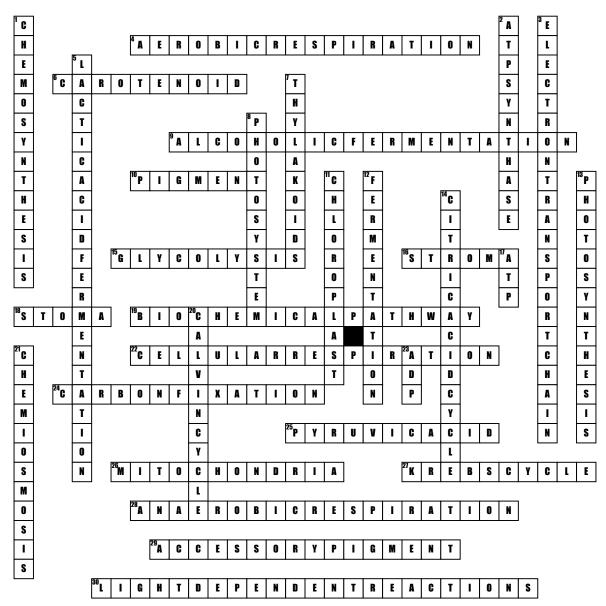
Bioenergetics



<u>Across</u>

- 4. Cellular respiration that requires oxygen
 6. Plant pigment responsible for red, orange, and vellow colors
- 9. Anaerobic respiration performed by yeast cells
- A natural compound that gives color to plants and animals
- 15. Anaerobic stage during cellular respiration that occurs in the cytoplasm
- **16.** Area of the chloroplast where the Calvin Cycle takes place
- 18. Pores on the underside of a leaf
- 19. Sequence of biochemical reactions, catalyzed by enzymes, that occur in all living cells and concerned mainly with the exchange of energy
- **22.** Chemical reactions in which glucose is converted into ATP in the mitochondria
- 24. The process of converting carbon dioxide from the atmosphere into carbohydrates, like glucose, by photosynthesis

- 25. The molecule glucose is converted to during alveolysis
- **26.** Membrane bound organelle where cellular respiration takes place
- **27.** Second stage of cellular respiration that requires only 2 ATP
- 28. Process that does not require oxygen to occur 29. Any pigment in plant leaves other than chlorophyll
- **30.** First phase of photosynthesis that occurs in the thylakoid membranes

Down

- 1. Process that uses chemical energy, instead of light energy, to make the energy storing molecule of glucose
- 2. Enzyme that adds a phosphate group to ADP to make ATP
- **3.** Third stage of cellular respiration when most ATP molecules are produced
- 5. Anaerobic respiration performed by bacteria and muscle cells

- 7. Site where oxygen in produced in the chloroplast
- 8. The mechanism in plants by which chlorophyll and other light-absorbing pigments absorb energy from sunlight
- 11. Membrane bound organelle where photosynthesis occurs
- 12. Another name for anaerobic resniration
- **13.** Reactions that convert light energy into chemical energy
- **14.** Another name for the Krebs cycle
- 17. Form of cellular energy synthesized in the mitochondria
- 20. Second phase of photosynthesis
- 21. Movement of hydrogen ions across a semipermeable membrane during cellular respiration or photosynthesis to generate ATP
- 23. A lower energy molecule that can be converted to ATP by adding a phosphate group