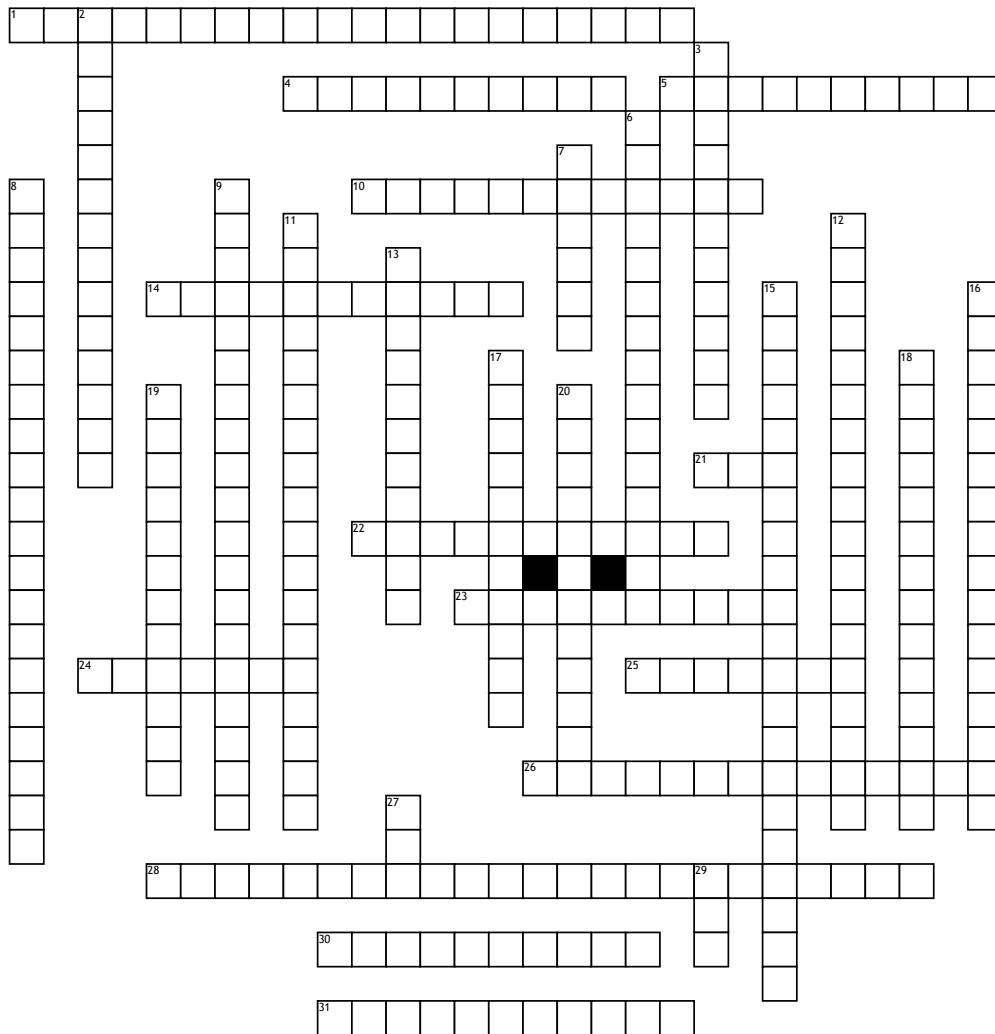


Name: _____

Bioenergetics



Across

1. anaerobic respiration performed by bacterial and fungal (yeast) cells
4. the anaerobic stage of cellular respiration that occurs in the cytoplasm
5. the site where oxygen is produced in the chloroplast
10. another name for anaerobic respiration
14. the green light absorbing pigment in the chloroplast
21. the third stage of cellular respiration that occurs in the cytoplasm
22. also known as light independent reactions and the second phase of photosynthesis
23. plant pigment responsible for yellow, orange, and red colors; provides health benefits
24. the pores on the underside of the leaf that allows gas (carbon dioxide and oxygen) exchange in plants
25. a natural compound that gives color to plants and animals
26. process of converting carbon dioxide from the atmosphere into glucose by photosynthesis
28. the first phase of photosynthesis that occurs in the thylakoid membranes

Word Bank

mitochondria
carbon fixation
ATP synthase
stroma
chlorophyll
biochemical pathway
calvin cycle

ETC
light dependent reactions
anaerobic respiration
cellular respiration
ADP
photosynthesis

chemiosmosis
thylakoids
lactic acid respiration
alcoholic respiration
aerobic respiration
chemosynthesis

glycolysis
krebs cycle
fermentation
stomata
accessory pigment
citric acid cycle

photosystem
chloroplast
pigment
pyruvic acid
carotenoid
ATP

30. the second stage of cellular respiration that only produces 2 ATP
 31. the enzyme that adds a phosphate group to adp to make atp
- ## Down
2. process that uses chemical energy, instead of light energy, to make the energy storing molecule of glucose
 3. a mechanism in which chlorophyll and other light-absorbing pigments absorb energy from sunlight
 6. another name for krebs cycle
 7. the area of the chloroplast where the Calvin Cycle takes place
 8. process that does not require oxygen to occur
 9. the chemical respiration in which glucose is converted to atp in the mitochondria
 11. cellular respiration which requires oxygen
 12. sequence of biochemical reactions, catalyzed by enzymes, that occur in all living cells and mainly with the exchange of energy
 13. the membrane bound organelle where photosynthesis occurs

15. anaerobic respiration performed by bacteria and muscle cells
16. any pigment in plant leaves other than chlorophyll and an assist in the process of photosynthesis
17. the molecule glucose is converted to during glycolysis
18. a chemical reaction that converts radiant light energy into chemical energy stored as glucose
19. movement of hydrogen ions across a semipermeable membrane during cellular respiration or photosynthesis to generation ATP
20. the membrane bound organelle where cellular respiration takes place
27. a form of cellular energy synthesized in the mitochondria by cellular respiration
29. a lower energy molecule that can be converted to atp by adding a phosphate group