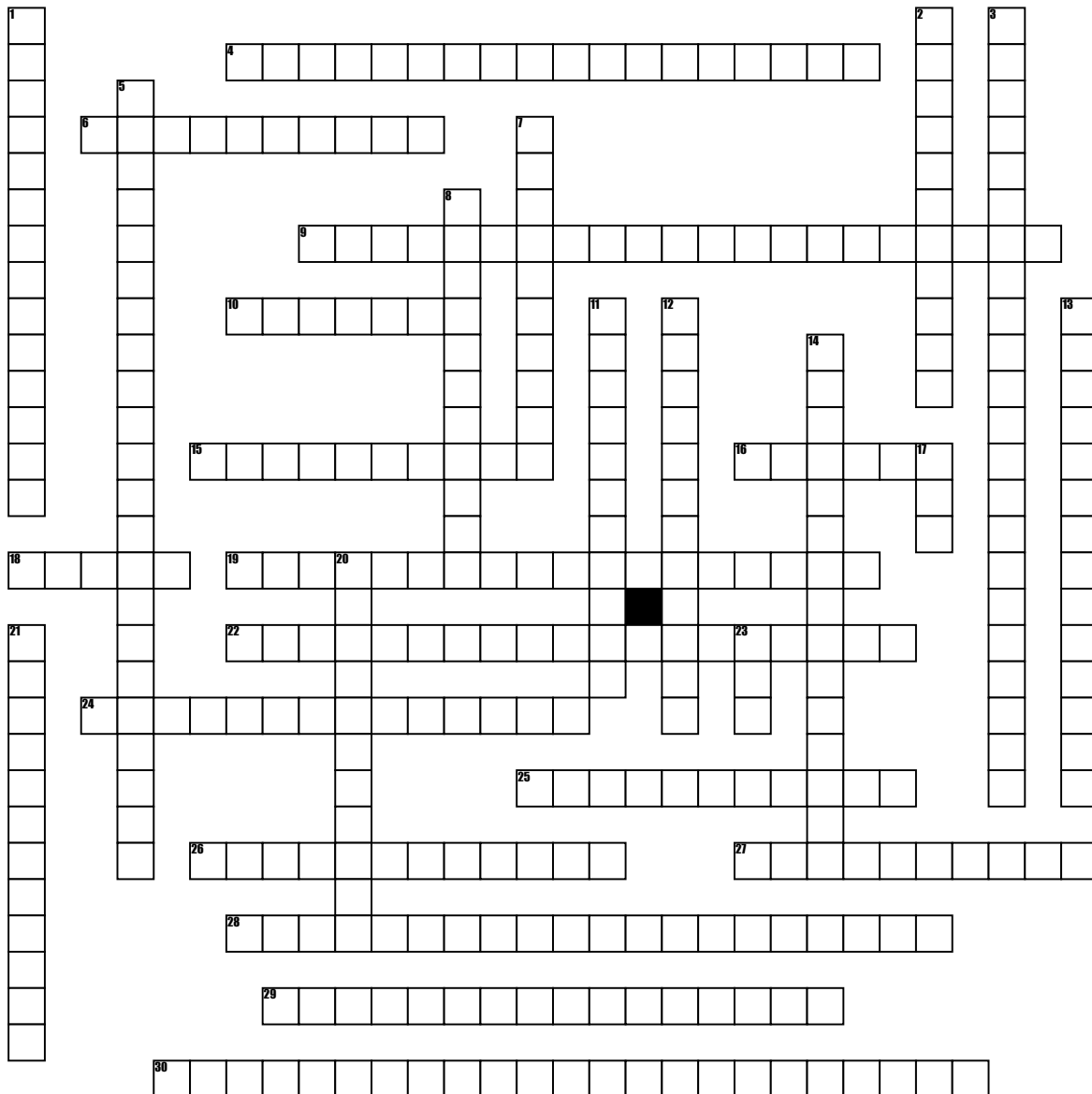


Name: _____

Bioenergetics



Across

4. Cellular respiration that requires oxygen
6. Plant pigment responsible for red, orange, and yellow colors
9. Anaerobic respiration performed by yeast cells
10. 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 glycolysis
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 is 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 respiration
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