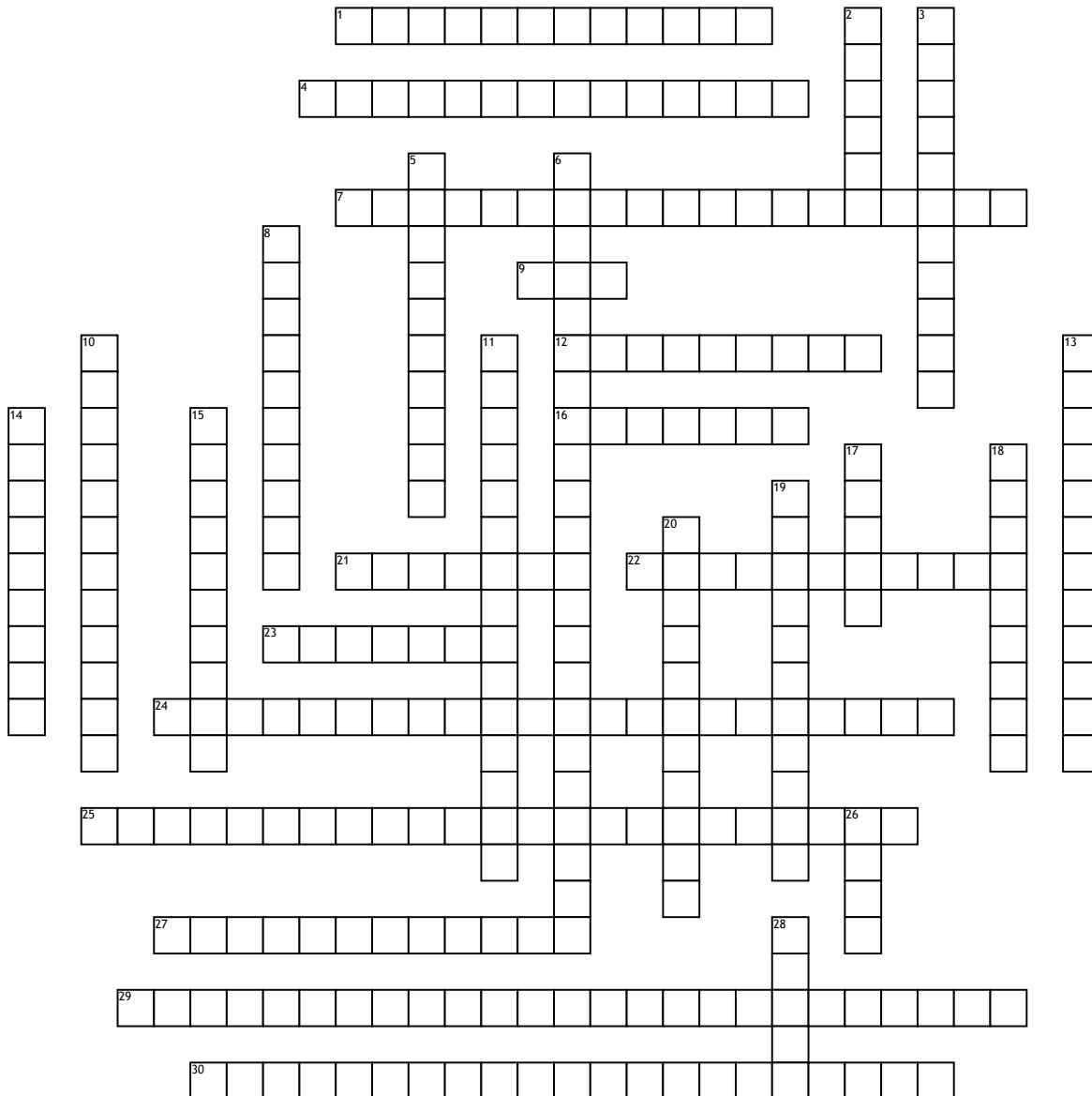


Exploration of Science



Across

1. Organelle where cellular respiration occurs.
4. Process of converting carbon dioxide and water into sugar using energy from the sun.
7. Pathway of breaking down sugar for energy using oxygen.
9. Chemical that stores and releases energy for the cell.
12. The material or protoplasm within a living cell, excluding the nucleus.
16. Measurement, amount of energy.
21. Small sugar made in photosynthesis.
22. Green pigment that traps light energy.
23. In need of oxygen.
24. A chain of proteins passing high energy electrons producing ATP and finally given to oxygen at the end of chain.

25. Take place on the thylakoid membrane, uses water and gives off oxygen, requires light.

27. A pathway of breaking down sugar for energy not using oxygen.

29. Take place in the stroma, uses carbon dioxide and makes the sugar.

30. A process in which some sugars (as glucose) are converted into alcohol.

Down

2. Space inside the chloroplast.

3. The 2 small molecules glucose is broken down into during glycolysis.

5. The breakdown of glucose by enzymes, releasing energy and pyruvic acid.

6. Process by which our muscle cells deal with pyruvate during anaerobic respiration.

8. Organisms that use an energy source, such as the sun, and make sugars.

10. Clusters of chlorophyll, on the thylakoid membrane.

11. A chemical that carries high energy electrons.

13. Organisms that must "eat" sugars.

14. No oxygen required.

15. Series of reactions that pyruvic acid enters making ATP and carbon dioxide.

17. Electron carrier used in photosynthesis.

18. Sac-like structures in the chloroplast.

19. A yellowish organic acid that occurs as an intermediate in many metabolic processes, especially glycolysis.

20. Organelle where photosynthesis occurs.

26. Electron carrier used in cellular respiration.

28. Stack of thylakoids.