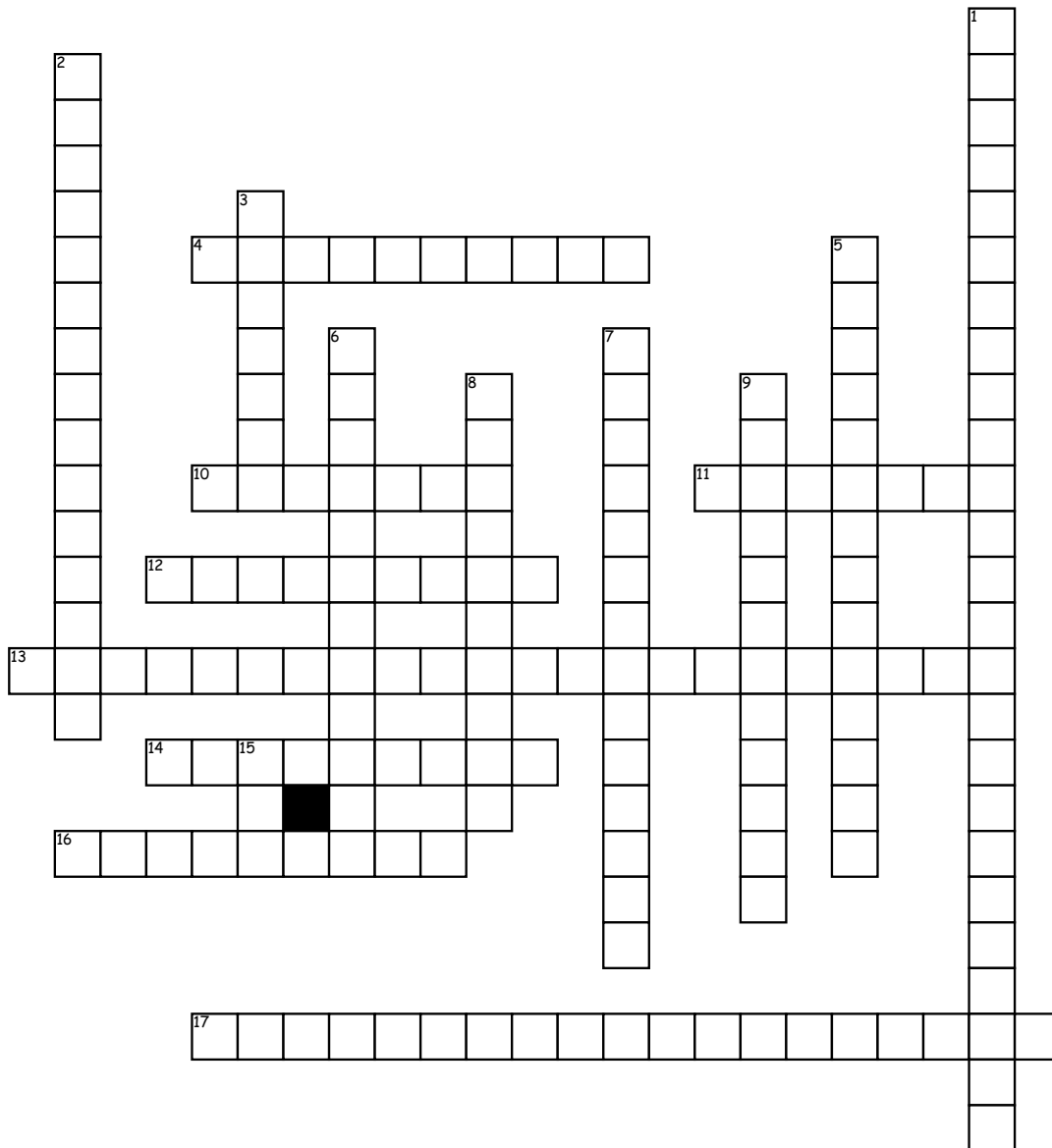


Cellular Energetics



Across

- 4. The process of splitting a glucose molecule into 2 pyruvic acid molecules
- 10. A process that requires oxygen
- 11. The folded inner membrane inside a mitochondrion
- 12. Anaerobic process where cells convert pyruvic acid into carbon dioxide and ethyl alcohol
- 13. Series of proteins embedded in a membrane along which energized electrons are transported.
- 14. A process that does not require oxygen
- 16. Glycolysis happens outside the mitochondria in the

17. Chemical process where mitochondria break down food molecules to produce ATP.

Down

- 1. Phase of photosynthesis where energy from light-dependent reactions is used to produce glucose and additional ATP molecules
- 2. In cellular respiration, series of reactions that break down glucose and produce ATP
- 3. $C_6H_{12}O_6$
- 5. Process by which autotrophs trap energy from sunlight with chlorophyll and use this energy to convert carbon dioxide and water into simple sugars

6. Cell organelle which acts as the cell's power plant to burn glucose and store energy as ATP

- 7. Phase of photosynthesis where light energy is converted to chemical energy in the form of ATP
- 8. The fermentation of human muscles in low oxygen conditions
- 9. If oxygen is not present, glycolysis is followed by ____
- 15. Molecule used by cells to store and transfer energy