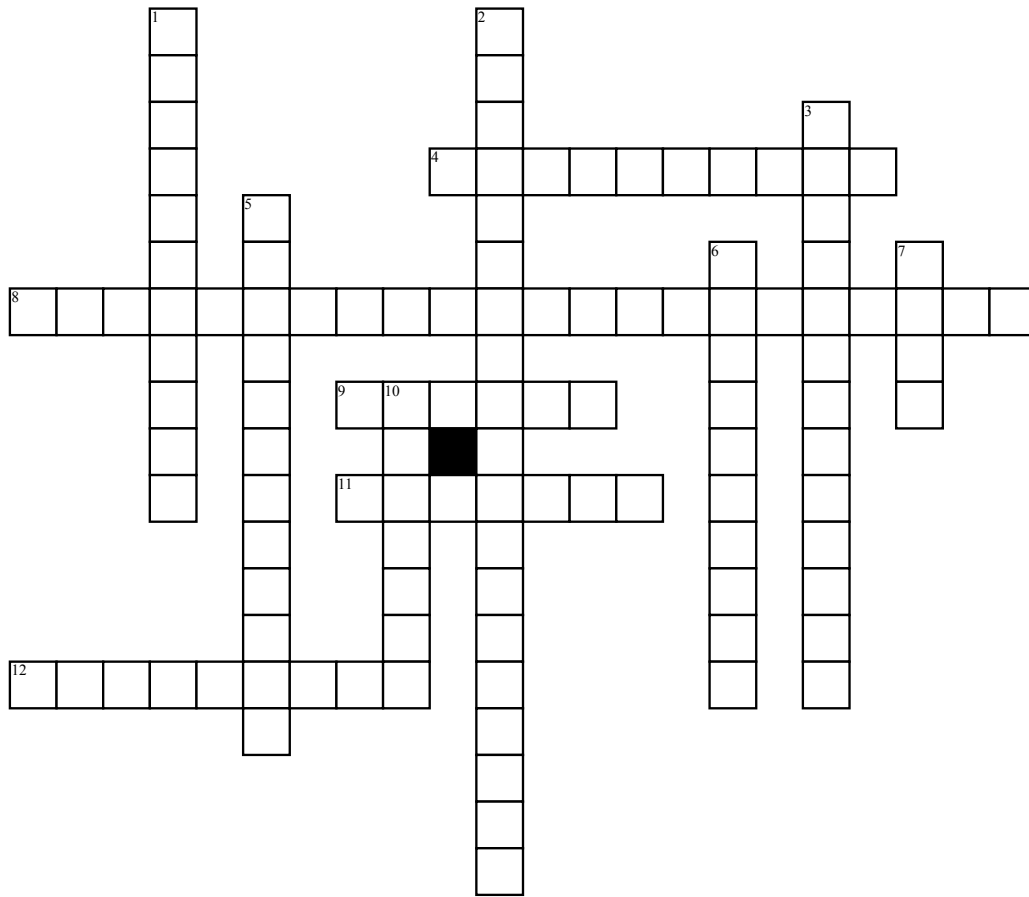


Cellular Respiration



Across

- 4. The first reaction of cellular respiration in the cytoplasm that breaks down glucose and extracts energy for cellular metabolism.
- 8. The third reaction of cellular respiration that uses high-energy electrons from the Krebs cycle to convert ADP to ATP.
- 9. The innermost part of the mitochondrion where the Krebs cycle occurs.
- 11. Folds in the inner membrane that provide the cell with more surface area for cellular respiration to occur.

- 12. A process that does not depend on or need oxygen.

Down

- 1. Supplies energy to cells during the Krebs cycle when oxygen is present.
- 2. The process that releases energy from food when oxygen is present.
- 3. A cell organelle that converts the chemical energy stored in food into compounds that are more convenient for the cell to use.
- 5. A process in which energy releases from food molecules by producing ATP in the absence of oxygen.

- 6. The second reaction of cellular respiration where pyruvic acid is broken down into carbon dioxide in a series of energy extracting processes.

- 7. Able to pick up a hydrogen ion and carry a pair of high-energy electrons which can be used to make more ATP. Also known as nicotinamide adenine dinucleotide.

- 10. A process that requires oxygen.

Word Bank

- | | | |
|--------------------------|--------------|----------------------|
| Anaerobic | Matrix | NAD+ |
| Electron Transport Chain | Pyruvic Acid | Cellular Respiration |
| Fermentation | Krebs Cycle | Aerobic |
| Cristae | Glycolysis | Mitochondrion |