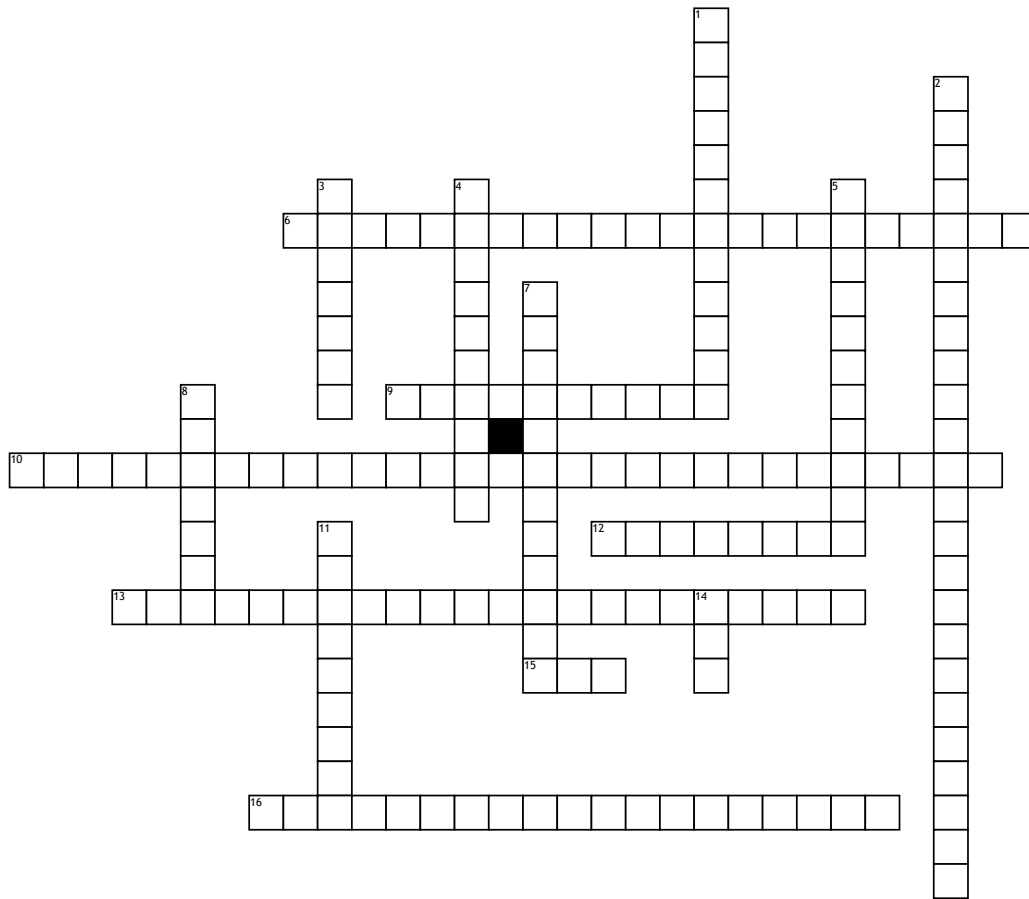


Cellular Respiration



Across

- 6. Series of electron transport is embedded in the inner mitochondrial membrane that shuttles electrons from NADH and FADH₂ to molecular oxygen
- 9. A series of reactions that extract energy from glucose by splitting it into two three-carbon molecules called pyruvates
- 10. Metabolic reaction that results in the formation of ATP or GTP by the direct transfer and donation of a phosphoryl group to ADP or GDP from a phosphorylated reactive intermediate
- 12. End product of glycolysis enters the Krebs cycle when there is sufficient oxygen available

- 13. Biological process by which glucose, fructose, and sucrose are converted into cellular energy and the Marable light black biological process by which glucose, fructose, and sucrose are converted into cellular energy and the metabolite lactate
- 15. Coenzyme that cells use for energy storage
- 16. Biological process which converts sugars into cellular energy, producing ethanol and carbon dioxide as a byproducts

- 3. The simple sugar produced in the photosynthetic reaction
- 4. Series of chemical reactions in most aerobic organisms in which cells breakdown glucose and other molecules in the presence of oxygen to produce carbon dioxide and energy in the form of ATP
- 5. Any enzyme, or catalytic protein that is primarily involved in the synthesis of ATP
- 7. Organelles with and eukaryotic cells that produce ATP, the main energy molecule used by the cell
- 8. Requiring air or oxygen for life or survival
- 11. Not requiring oxygen for life or survival
- 14. A molecule that has renewable energy stored to help ourselves you are basic body tasks like contracting a muscle or digesting food

Down

- 1. If fusion of hydrogen ions across the biological membrane due to a proton gradient that forms on the other side of the membrane
- 2. The metabolic pathway in which the mitochondria in cells use their structure, enzymes, and energy released by the oxidation of nutrients to reform ATP

Word Bank

- Glucose
- ATP
- Electron transport chain
- Glycolysis
- Aerobic
- Oxidative phosphorylation

- ADP
- Pyruvate
- Substrate level phosphorylation
- Anaerobic
- Lactic acid Fermentation

- Krebs cycle
- Mitochondria
- Chemiosmosis
- ATP synthase
- Alcohol Fermentation