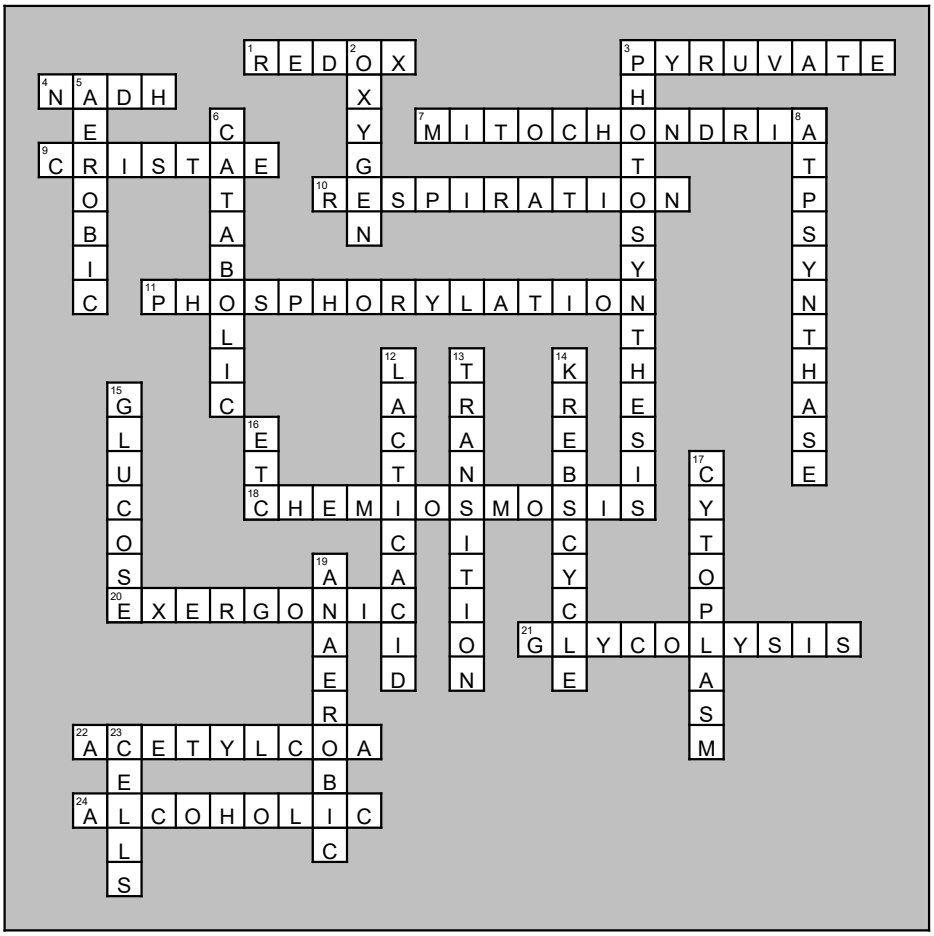
Crossword



Across

1. Glucose to CO2, NAD+ to NADH, FAD to FADH2, Oxygen to water, are all this type of electron transferring reactions.
3. Glycolysis end product along with 2NADH and 2 ATP molecules.
4. Major electron carrier into the ETC. Produced during glycolysis, transition reaction, and Krebs cycle. Generates the most ATP molecules in cellular respiration.
7. Site of cellular respiration. Matrix, cristae, outer and inner membranes are involved.
9. Site of ETC process in eukaryotes. Inner membrane of mitochondria.
10. Cellular __ breaks down a simple sugar into carbon dioxide, water, and energy.
11. Oxidative ___ adds Phosphate to ADP to form ATP. Occurs mainly in the electron transport chain.
18. Another name for oxidative phosphorylation in which ATP is formed especially in the ETC.
20. Glucose to ATP in cellular respiration. Energy releasing.
21. "Sugar Splitting". First major stage of cellular respiration.
22. 2 carbon molecule that enters respiration during the transition (link) reaction from glycolysis.
24. Fermentation that produces ethyl alcohol and CO2 in yeast and bacteria. Used for brewing, baking, and winemaking.

Down

2. Strongly attracts electrons, produces water at the end of the ETC.
3. Source of glucose in plants.
5. Requires oxygen. Krebs cycle.
6. Cellular respiration is a ___ reaction in which bonds are broken down. (e.g. glucose to energy).
8. Enzyme that allows Hydrogen ions to flow across concentration gradient to power chemiosmosis.
12. Type of anaerobic fermentation that produces a small amount of energy when oxygen is absent. Builds up in muscles especially after exersion.
13. Reaction after glycolysis, before Krebs cycle in the cytoplasm, producing CO2, NADH and acetyl Co-A.
14. Takes place in the matrix of the mitochondria. aerobic stage of cellular respiration. Produces CO2, ATP, NADH, FADH2.
15. Molecule necessary for cellular respiration, both anaerobic and aerobic.
16. Oxidative phosphorylation occurs mostly here (abbrev.). Generates up to 32 ATP.
17. Site of glycolysis in both eukaryote and prokaryote cells.
19. Without oxygen. Glycolysis. Fermentation.
23. Where does cellular respiration occur?