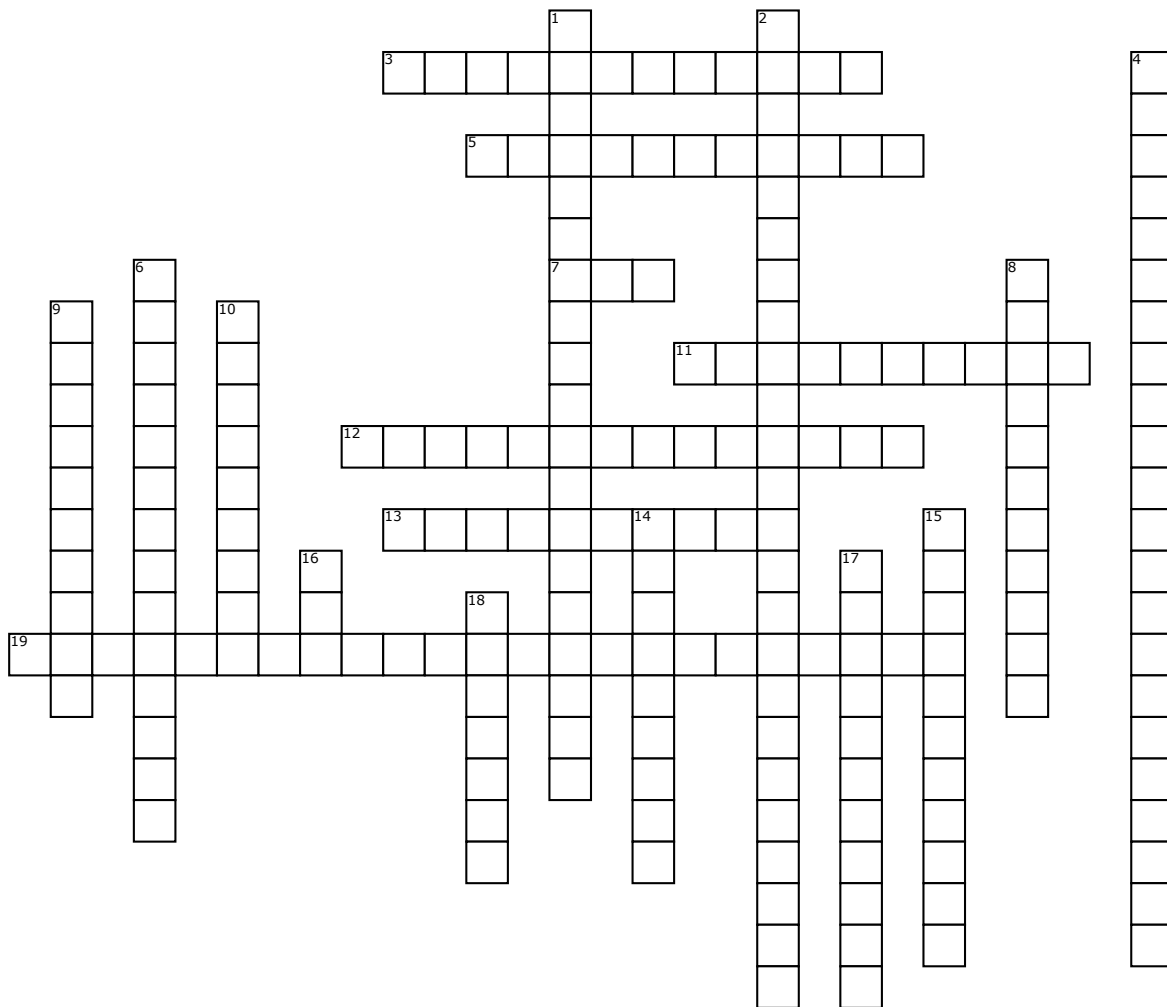


Name: _____ Date: _____ Period: _____

Photosynthesis & Cellular Respiration crossword



Across

- 3.** anaerobic process by which ATP is produced by glycolysis
5. light-absorbing pigment molecule in photosynthetic organisms
7. adenosine diphosphate; low-energy molecule that can be converted into ATP
11. process during cellular respiration that breaks down a carbon molecule to produce molecules that are used in the electron transport chain
12. process by which ATP is synthesized by using chemicals as an energy source instead of light
13. product of fermentation in many types of cells, including human muscle cells
19. part of photosynthesis that absorbs energy from sunlight and transfers energy to the light-independent reaction

Down

- 1.** process of producing ATP by breaking down carbon-based molecules when oxygen is present
2. part of photosynthesis that uses energy absorbed during the light-dependent reactions to synthesize carbohydrates
4. series of proteins in the thylakoid and mitochondrial membranes that aid in converting ADP to ATP by transferring electrons
6. process by which light energy is converted to chemical energy; produces sugar and oxygen from carbon dioxide and water
8. process by which a photosynthetic organism uses energy to synthesize simple sugars from carbon dioxide
9. anaerobic process in which glucose is broken down into two molecules of pyruvate and two net ATP are produced

- 10.** membrane-bound structure within chloroplasts that contains chlorophyll
14. process that does not require oxygen to occur
15. enzyme that catalyzes the reaction that adds a high-energy phosphate group to ADP to form ATP
16. adenosine triphosphate; high-energy molecule that contains, within its bonds, energy that cells can use
17. series of light-absorbing pigments and proteins that capture and transfer energy in the thylakoid membrane
18. process that requires oxygen to occur