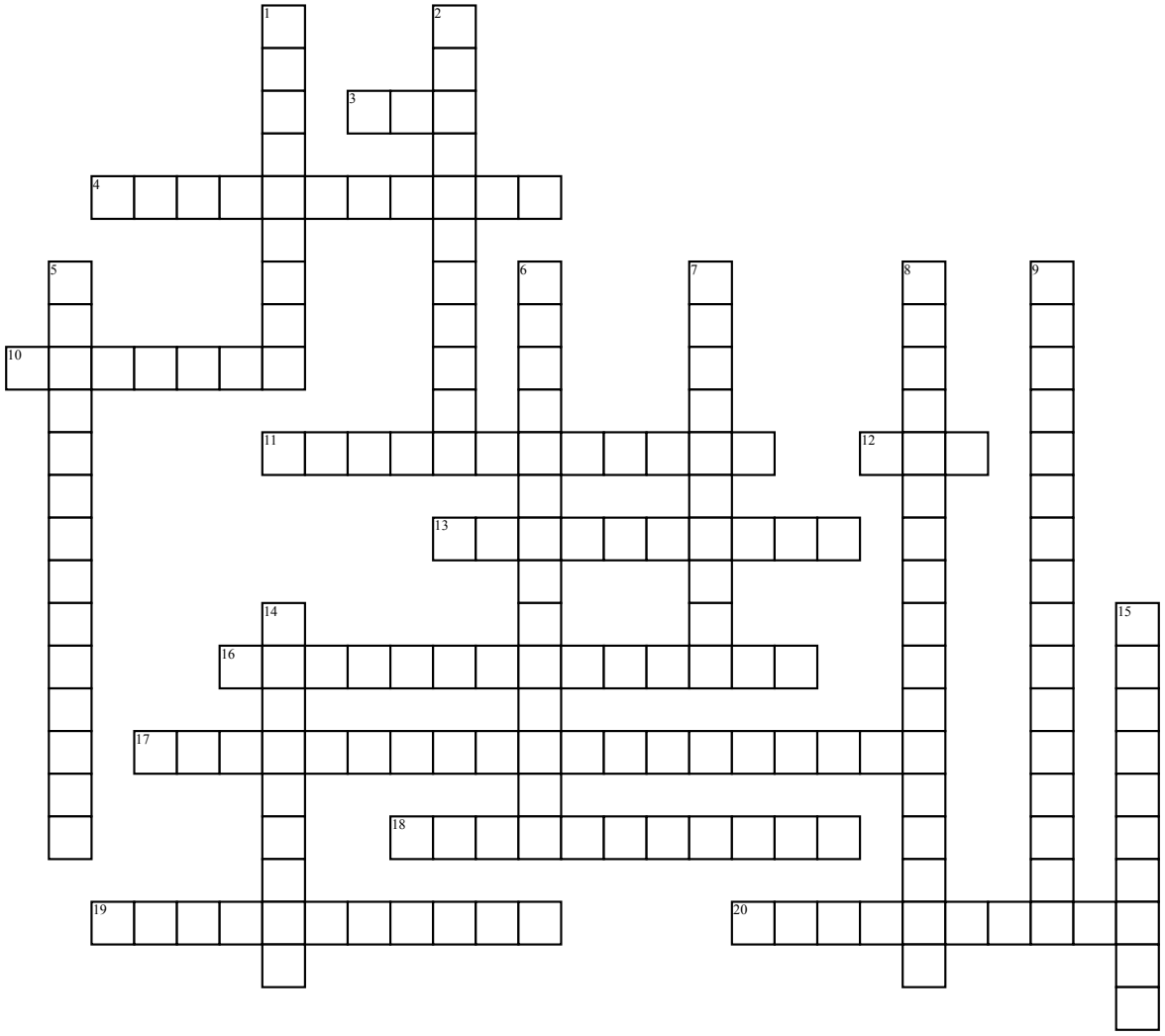
Name: _____ Date: _____

Chapter 4 Crossword



Across

3. Adenosine diphosphate-low-energy molecule that can be converted into ATP.
4. Light-absorbing pigment molecule in photosynthesis organisms.
10. Process that requires oxygen to occur.
11. Anaerobic process by which ATP is produced by glycolysis.
12. Adenosine triphosphate-high-energy molecule that contains, within its bonds, energy that cells can use.
13. Process during cellular respiration that breaks down a carbon molecule to produce molecules that are used in the electron transport chain.
16. Process by which light energy is converted to chemical energy.
17. Process of producing ATP by breaking down carbon-based molecules when oxygen is present.
18. Series of light absorbing pigments and proteins that capture and transfer energy in the thylakoid membrane.
19. Process by which a photosynthetic organism uses energy to synthesize simple sugars from CO2.
20. Cellular respiration occurs in this type of cell.

Down

1. Process that does not require oxygen to occur.
2. Enzyme that catalyzes the reaction that adds a high-energy phosphate group to ADP to form ATP.
5. Process by which ATP is synthesized by using chemicals as an energy source instead of light.
6. A reaction that uses energy from sunlight and transfers energy to the light independent reactions.
7. Anaerobic process in which glucose is broken down into two molecules of pyruvate and two net ATP are produced.
8. A chain that aids in converting ADP to ATP by transferring electrons.
9. A reaction that uses energy absorbed during the light dependent reactions to synthesize carbohydrates.
14. Membrane-bound structure within chloroplasts that contains chlorophyll and other light absorbing pigments.
15. Product of fermentation in many types of cells.