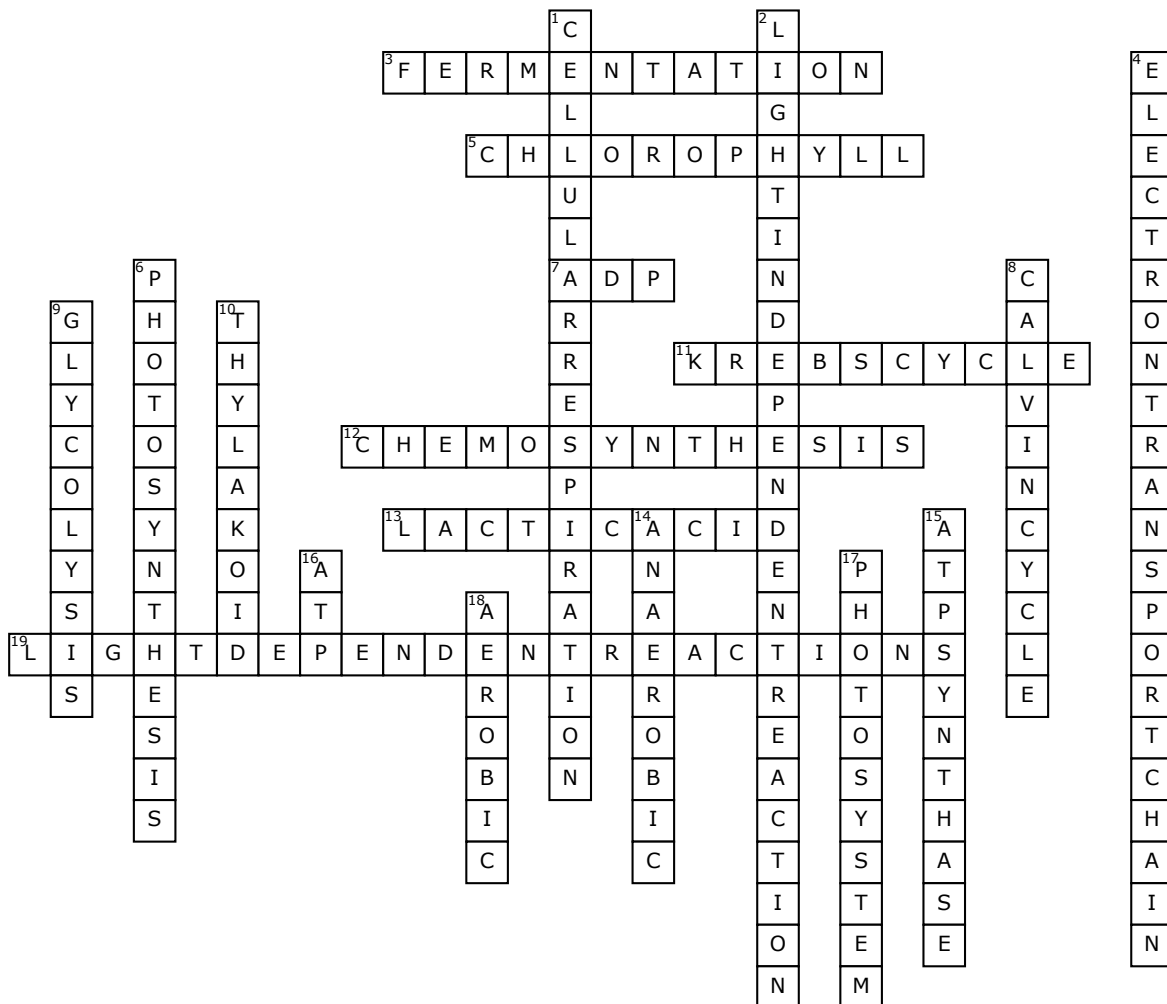


Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

# 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