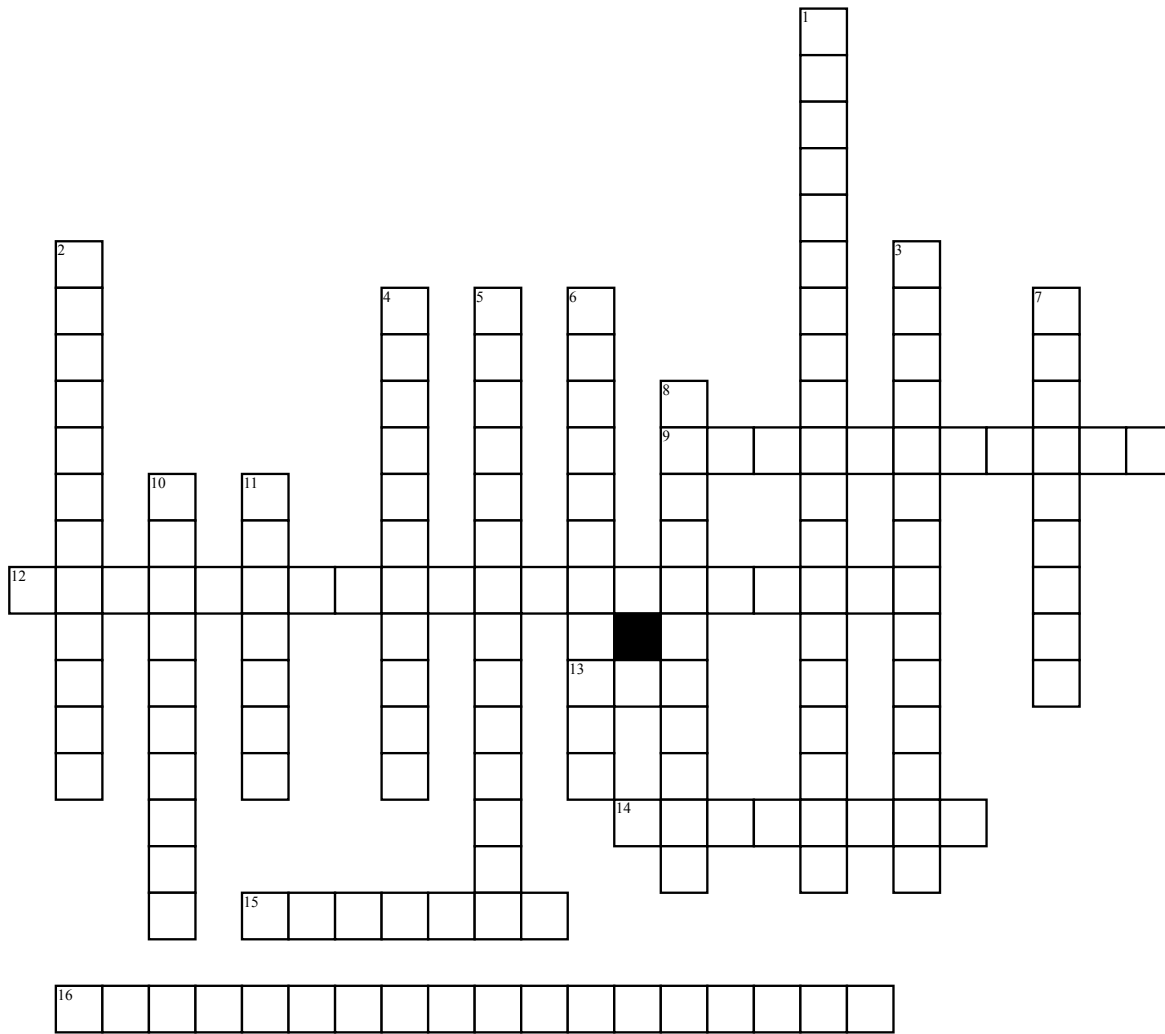


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Photosynthesis and Cellular Respiration



## Across

9. An organism that must eat plants or other animals for food  
 12. Cellular respiration that takes place where there is NO oxygen  
 13. Short for Adenosine Triphosphate. It is the energy that is released when the mitochondrion breaks down the sugars you have eaten.  
 14. The first step of Cellular Respiration where glucose is broken in half and 2 ATP energy units are released.  
 15. Sugars produced by photosynthesis  
 16. Cellular respiration that takes place when there is oxygen

## Down

1. The process that takes place inside all eukaryotic cells (both plants and animals) that breaks down sugars to produce energy in the form of ATP  
 2. An organelle inside an animal AND plant cell where cellular respiration takes place  
 3. The process by which plants use carbon dioxide + energy from the sun to create sugars and oxygen  
 4. The second of two major stages in photosynthesis, involving atmospheric CO<sub>2</sub> fixation and reduction of the fixed carbon into carbohydrate.

5. The steps in photosynthesis that occur on the thylakoid membranes of the chloroplast and that convert solar energy to the chemical energy of ATP and NADPH, evolving oxygen in the process.  
 6. An organelle inside a plant cell only where photosynthesis takes place  
 7. Organism that can capture energy from sunlight or chemicals and use it to produce its own food from inorganic compounds; also called a producer.  
 8. Primary light absorbing pigment in autotrophs  
 10. Produces 36 ATP energy units for each sugar molecule broken up  
 11. The small openings on the undersides of most leaves through which oxygen and carbon dioxide can move