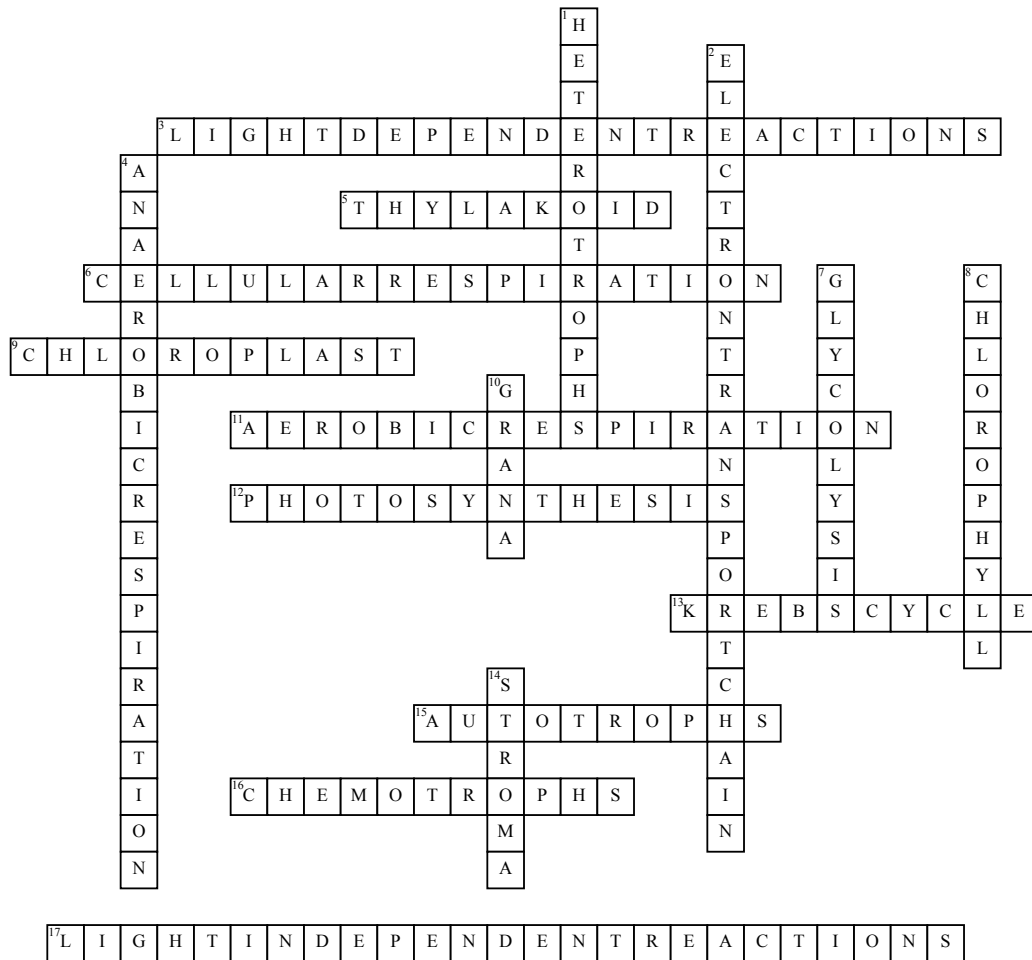


Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

# Photosynthesis and Cellular Respiration Crossword Puzzle



## Across

3. The 1st step of Photosynthesis; Light Energy is captured and stored as NADPH and Oxygen gas is released; requires light
5. Flattened discs where Light-Dependent Reactions occur
6. The process by which cells obtain energy from Carbohydrates; Atmospheric Oxygen combines with Glucose to form Water and Carbon Dioxide
9. The Organelle found in plants and algae cells where Photosynthesis takes place
11. Cannot occur without Oxygen; requires Oxygen
12. The process by which plants, algae, and some bacteria use sunlight, carbon dioxide, and water to produce Carbohydrates and Oxygen

13. A series of biochemical reactions that convert Pyruvic Acid into Carbon Dioxide and Water; it is the major pathway of oxidation for many organisms and it releases energy; 2nd Step of Cellular Respiration
15. Able to make energy from Light Energy (Plants)
16. Able to make energy from Chemicals (Bacteria)
17. The 2nd step of Photosynthesis; Calvin Cycle forms Organic compounds using the stored energy(Glucose)

## Down

1. Obtains energy from food; Cannot make energy (Animals & Humans)

2. Known as ETC, it converts the most energy into ATP for cells; domino effect; Final Step in Cellular Respiration

4. Can occur with or without Oxygen present; Does NOT require Oxygen

7. The anaerobic breakdown of glucose to Pyruvic Acid, which makes a small amount of energy available to cells in the form of ATP; 1st Step of Cellular Respiration

8. A green pigment found in most plant cells; gives plants their green color, reacts with sunlight, carbon dioxide, and water to form Carbohydrates; located in Chloroplast

10. Stacks of Thylakoids

14. The Solution/Space inside the Thylakoid where Light-Independent Reactions occur

## Word Bank

Chlorophyll

Aerobic Respiration

Photosynthesis

Grana

Stroma

Light-Independent Reactions

Chemotrophs

Glycolysis

Krebs Cycle

Thylakoid

Cellular Respiration

Electron Transport Chain

Light-Dependent Reactions

Heterotrophs

Anaerobic Respiration

Chloroplast

Autotrophs