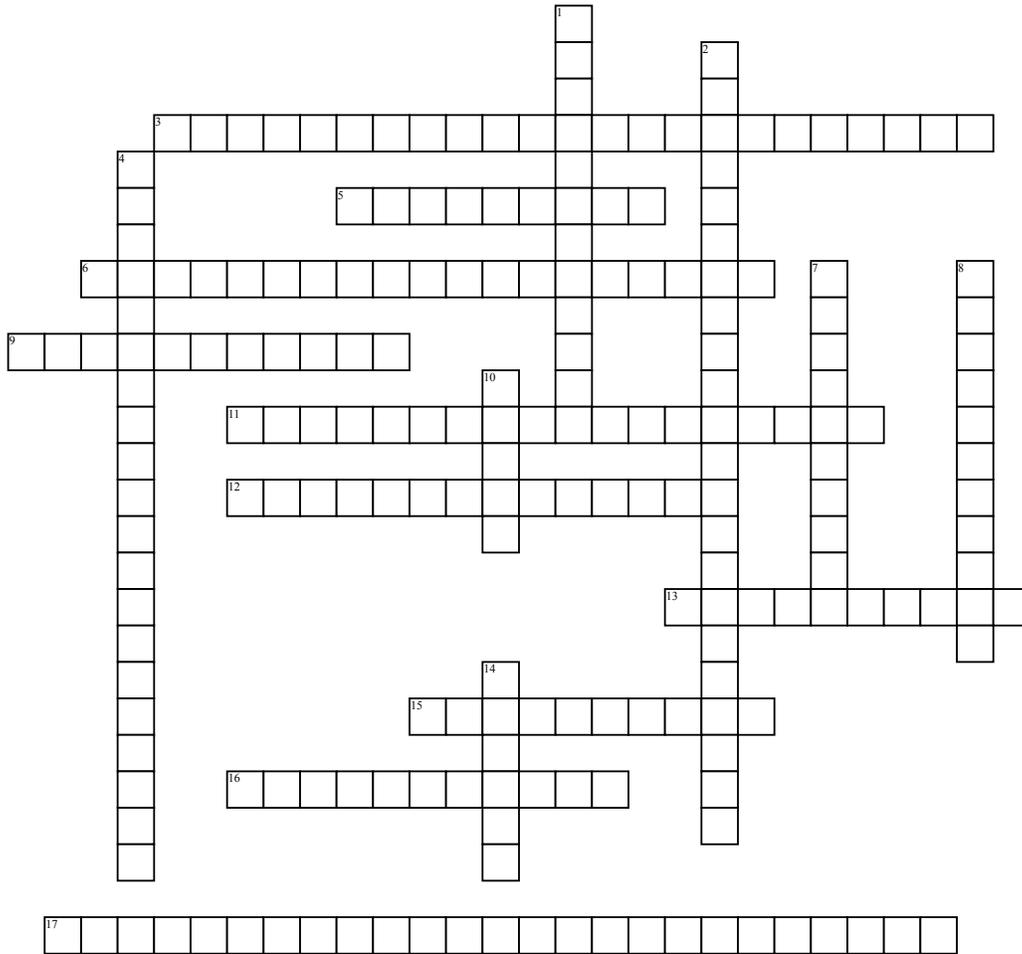


Photosynthesis and Cellular Respiration Crossword Puzzle



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

- | | | | |
|---------------------|-----------------------|-----------------------------|---------------------------|
| Stroma | Grana | Chemotrophs | Electron Transport Chain |
| Photosynthesis | Heterotrophs | Cellular Respiration | Autotrophs |
| Krebs Cycle | Chloroplast | Thylakoid | Light-Dependent Reactions |
| Aerobic Respiration | Anaerobic Respiration | Light-Independent Reactions | Chlorophyll |
| Glycolysis | | | |