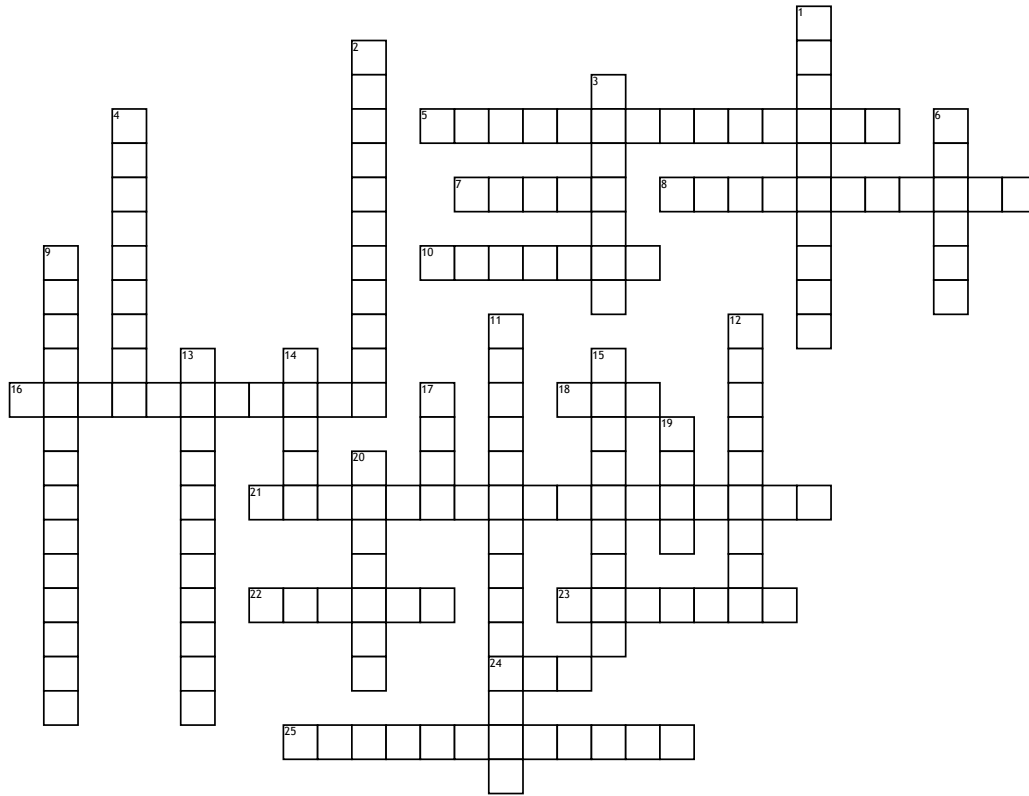


Name: \_\_\_\_\_

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

# Photosynthesis



**Across**

- 5. ATP and NADP+ can return to the.....
- 7. is needed for the light reactions
- 8. a pigment in the chloroplasts, will absorb the sun's energy
- 10. photosynthesis is an \_\_\_\_\_ cycle
- 16. enzyme produced by the movement of protons
- 18. this enters from the atmosphere during the calvin cycle
- 21. the absorption of the sun's energy occurs here
- 22. the calvin cycle occurs in this part of the chloroplast
- 23. autotrophs use photosynthesis to make this

24. energy comes from the.....

25. organisms that can't make their own organic compounds

**Down**

- 1. organisms that make their own organic compounds
- 2. carbon dioxide and the energy created in the light reactions are used to form organic compounds (like glucose)
- 3. are moved into the thylakoid membrane when the energy from the electrons is lost
- 4. increased light intensity excites more.....
- 6. given off during photosynthesis that is useful to us as humans
- 9. energy is absorbed from sunlight and converted into chemical energy which is temporarily stored

11. factor for the rate of photosynthesis increases as light intensity increases

12. when enzymes fail, the rate of photosynthesis....

13. with too high of a temperature, the enzymes become.....

14. ATP and \_\_\_\_\_ move to the calvin cycle together

15. factor for increased CO2 would increase the rate of photosynthesis to a point, then level off

17. the calvin cycle can occur in the .....

19. CO2 combines with this to form 3-PGA

20. plants use ATP and NADPH to make organic compounds in the form of sugar (\_\_\_\_\_)

**Word Bank**

- |             |                    |                 |             |              |
|-------------|--------------------|-----------------|-------------|--------------|
| ineffective | thylakoid membrane | dark            | NADPH       | calvin cycle |
| CO2         | CO2 levels         | ATP synthase    | oxygen      | decreases    |
| RuBP        | sun                | light reactions | glucose     | glucose      |
| stroma      | light reactions    | heterotrophs    | light       | ongoing      |
| autotrophs  | electrons          | light intensity | chlorophyll | protons      |