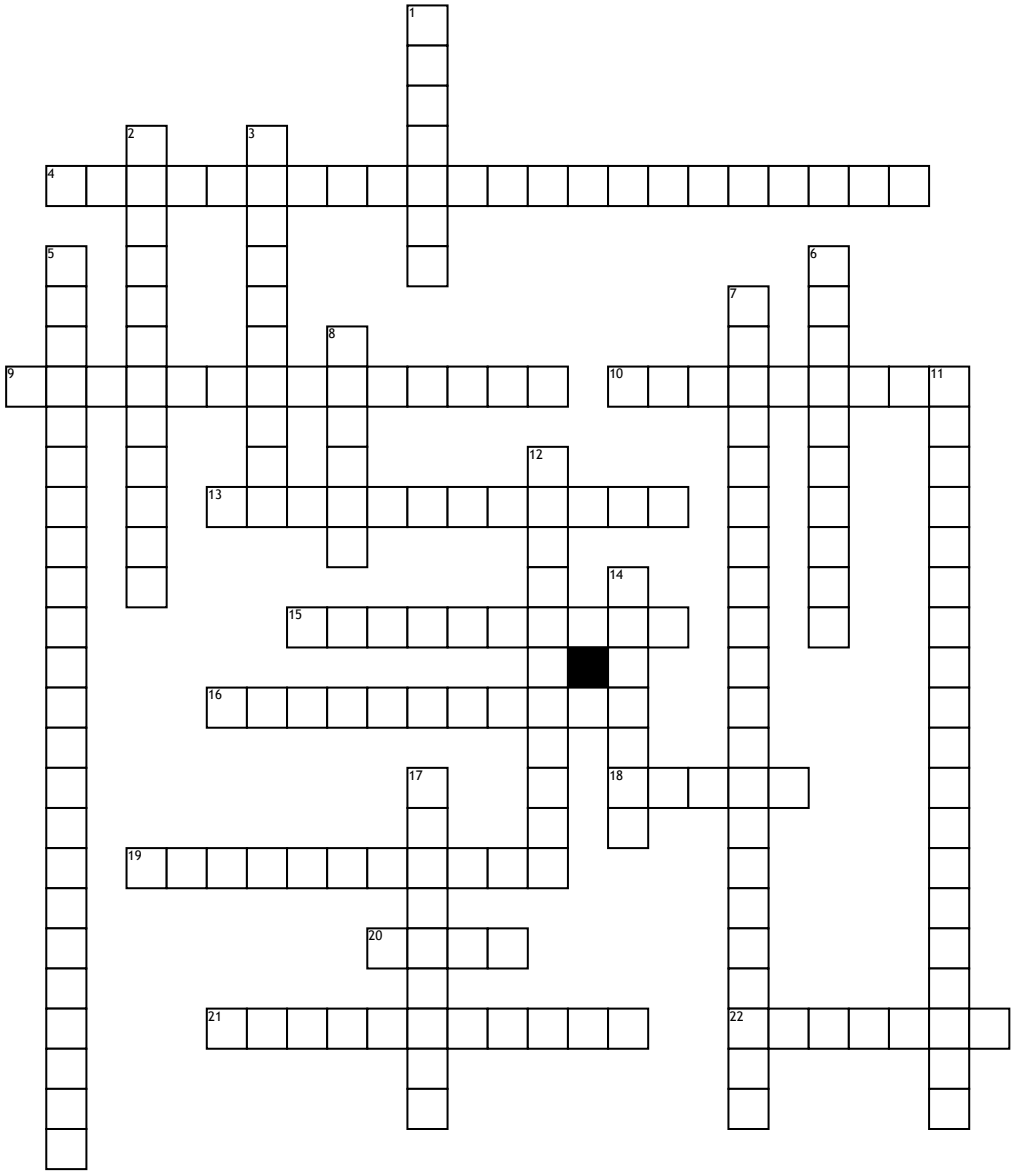
Name: _____ Date: _____

UNIT 3



Across

4. high-energy electrons from the Kreb cycle are used to convert ADP and ATP

9. the complex process by which carbon dioxide, water, and certain inorganic salts are converted into carbohydrates by green plants, algae, and certain bacteria, using energy from the sun and chlorophyll.

10. process that does not require oxygen

13. process by which cells release energy in the absence of oxygen

15. first step in releasing the energy of glucose, in which a molecule of glucose is broken into two molecules

16. light-collecting units of the chloroplast

18. one of the carrier molecules that transfers high-energy electrons from the chlorophyll to other molecules

19. reactions of photosynthesis in which energy from ATP NADPH is used to build high energy compounds such as sugars

20. electron carrier involved in glycolysis

21. principle pigment of plants and other photosynthetic organisms, captures light energy.

22. process that requires oxygen

Down

1. The amount of energy needed to raise temperature of 1 gram of water

2. organisms that obtain energy from the food they consume

3. 2nd stage of cellular respiration, pyrovic acid is broken down

5. reactions of photosynthesis that use energy from light to produce ATP and NADPH

6. organisms that make their own food

7. chemical compounds that cells use to store and release energy

8. region outside the thyiakoid membranes in chloroplast

11. process that releases energy by breaking down glucose and other food molecules

12. large protein that uses energy from H+ ions to bind ADP and phosphate group together to produce ATP

14. light absorbing molecules

17. saclike photosynthetic found in chloroplast