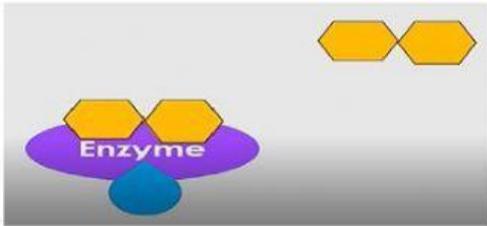


**AP Biology Topic 1.4 – Carbohydrates**

1. How do plants get carbohydrates for themselves?
2. What is the chemical formula for glucose?
3. Monosaccharide means \_\_\_\_\_ What are the 3 main monosaccharides? \_\_\_\_\_  
\_\_\_\_\_
4. How do you put two monomers together?
5. What does glycosidic linkage mean? \_\_\_\_\_  
\_\_\_\_\_
6. Explain what is occurring in the following graphic.



7. How do you get a disaccharide? \_\_\_\_\_  
\_\_\_\_\_
8. When you eat table sugar (sucrose) how do you break it down to individual monosaccharides? \_\_\_\_\_  
\_\_\_\_\_
9. What happens during hydrolysis? \_\_\_\_\_  
\_\_\_\_\_
10. As plants go through photosynthesis they are building \_\_\_\_\_. When you put the G3P's together you get \_\_\_\_\_.
11. Plants connect their glucose molecules into long chains called \_\_\_\_\_. What is between each glucose molecule? \_\_\_\_\_
12. What are the uses of the following carbohydrates:
  - Starch \_\_\_\_\_
  - Glycogen \_\_\_\_\_
  - Cellulose \_\_\_\_\_
  - Chitin \_\_\_\_\_

13. What do plants do with polysaccharides? \_\_\_\_\_  
\_\_\_\_\_
14. Photosynthesis happens in the \_\_\_\_\_ and then
15. How are the bonds in cellulose different from the bonds of other carbohydrates? \_\_\_\_\_  
\_\_\_\_\_
16. Why can we not break down cellulose? \_\_\_\_\_  
\_\_\_\_\_
17. Why can we break down starch? \_\_\_\_\_  
\_\_\_\_\_
18. What causes our blood sugar to rise? What happens as a result of this? \_\_\_\_\_  
\_\_\_\_\_
19. How is glycogen formed and what is its purpose? \_\_\_\_\_  
\_\_\_\_\_
20. What do we do with excess glucose/sugar? \_\_\_\_\_
21. What are the fatty acids in our body used for? \_\_\_\_\_  
\_\_\_\_\_
22. How do we use excess molecules to help us get through a workout? \_\_\_\_\_  
\_\_\_\_\_
23. How do we keep our body at homeostasis with the intake of carbohydrates? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_