

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? _____

