



**AP Biology Topic 1.5 – Structure & Function of Biological Molecules**

1. Where are the carbons located in nucleic acids? \_\_\_\_\_
2. What do the numbers stand for on the nucleic acid? \_\_\_\_\_
3. DNA typically goes from \_\_\_\_\_ to \_\_\_\_\_. Why do they say the DNA molecule is antiparallel? \_\_\_\_\_
4. New DNA molecules are always added to the \_\_\_\_\_. \_\_\_\_\_
5. How do the adenine and thymine nucleotides connect to each other? \_\_\_\_\_
6. How do the guanine and cytosine connect to each other? \_\_\_\_\_
7. What does this say about A to T and G to C bonds? \_\_\_\_\_
8. If you change the shape of a protein you change the \_\_\_\_\_ which can be \_\_\_\_\_
9. How do mutations occur in DNA? \_\_\_\_\_
10. Proteins are comprised of \_\_\_\_\_ of \_\_\_\_\_. Proteins join together through \_\_\_\_\_. which are \_\_\_\_\_. Hundreds of peptide bonds are called \_\_\_\_\_

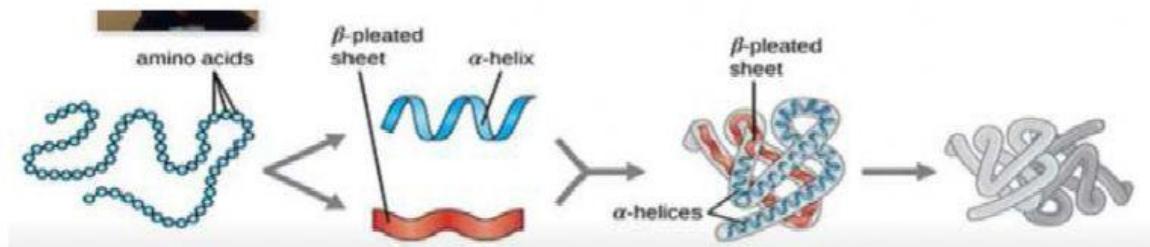
11. Give the definition and example for the following:

- Primary Protein structure - \_\_\_\_\_

- Secondary Protein Structure - \_\_\_\_\_

- Tertiary Protein Structure - \_\_\_\_\_

- Quarternary Protein Structure - \_\_\_\_\_



12. The most complex protein structure is \_\_\_\_\_. The most simple protein structure is \_\_\_\_\_. \_\_\_\_\_

13. What is the difference between the structure of cellulose and starch? \_\_\_\_\_

14. Why can our bodies digest starch and glycogen, but not cellulose? \_\_\_\_\_