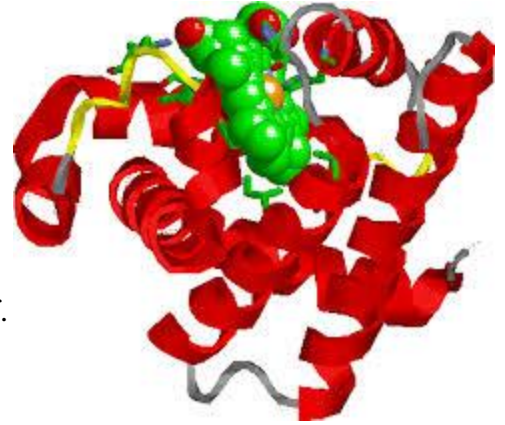


## The Macromolecule Worksheet

Read pages 44-48 in the text and then answer the following questions on a separate piece of paper.

1. a. What is a monomer?  
b. What is a polymer?  
c. How does a monomer relate to a polymer?
2. List the four carbon based molecules that all organisms are made up of.  
These are the four macromolecules!



### Carbohydrates:

3. What are two main functions of carbohydrates?
4. What is a monosaccharide? Give two examples.
5. What is a disaccharide? Give one example.
6. What is a polysaccharide? List and describe the three examples of polysaccharides.
7. Would a disaccharide be considered a polymer? Explain.
8. Would a polysaccharide be considered a polymer? Explain.
9. Would a monosaccharide be considered a polymer? Explain.

### Lipids:

10. List two functions of lipids.
11. List three examples of lipids.
12. Describe the structure of a phospholipid.

### Proteins:

13. List several functions of proteins.
14. How many amino acids are there?
15. How many amino acids can your body make? Where do you get the rest of them?
16. Name the special bond that holds proteins together.
17. What determines a protein's structure and function?
18. How are hydrogen bonds involved in the structure of a protein?

### Nucleic Acids:

19. What is the job of a nucleic acid?
20. List the two examples of nucleic acids.
21. What is the relationship between nucleic acids and proteins?

22. OK, so we have learned that the 4 macromolecules are polymers that are made up of monomers. Go back through the previous four sections and list the monomers for each of the four macromolecules. (Hint: In some sections it is clearly stated, other sections require a bit of thinking. Just remember, a monomer is the small thing you use to build the big thing).

Carbohydrate:

Lipid:

Protein:

Nucleic Acid: