**Biology for Health Sciences**

**Chapter 3 Worksheet Name:**

1. Why is carbon considered the perfect “tinker toy”?
2. What are the 4 groups of macromolecules?
	1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What are hydrocarbons?
4. What are functional groups?
5. What is a monomer?
6. What is a polymer?
7. Describe what is happening here:



1. Describe what is happening here:



1. Carbohydrates are made up of what elements? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What is the monomer of carbs? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What is the covalent bond called that links monomers in carbs? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Give an example of a monosaccharide: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. How many carbons are in a pentose sugar? \_\_\_\_\_\_
6. What are the 4 major classes of polysaccharides?
7. What is the monomer of proteins? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. What is the covalent bond called that links monomers in proteins? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Label the parts of the basic amino acid:
	1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



* 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. How many amino acids are there? \_\_\_\_\_\_\_
2. What are the 4 levels of organization of a protein?
3. What can denature a protein to make it nonfunctional?
4. What is the monomer of a nucleic acid? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. What is the covalent bond called that bonds monomers in a nucleic acid? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. A nucleotide is made of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. In DNA, the sugar is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
8. In RNA, the sugar is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
9. What are saturated fatty acids?
10. What are unsaturated fatty acids?