

\*VI-1 \_\_\_\_C \_\_\_\_NC

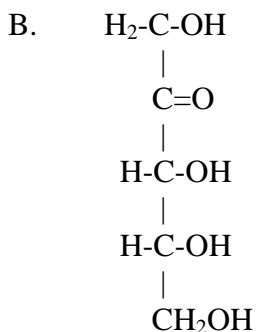
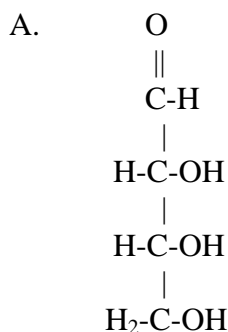
\*\*VII-1 \_\_\_\_C \_\_\_\_NC

\*\*\*VII-2 \_\_\_\_C \_\_\_\_NC

**Chemistry 130**  
**Worksheet 7**

Name: \_\_\_\_\_

A. Refer to the following to answer questions 1-5.



- \_\_\_\_ \*1. Structure "A" is an example of an:  
A. Ketotetrose B. Aldotetrose C. Aldopentose D. Ketopentose
- \_\_\_\_ 2. How many chiral carbons does structure "a" have?  
A. 1 B. 2 C. 3 D. 4
- \_\_\_\_ 3. How many optical isomers are possible for structure "B"?  
A. 2 B. 4 C. 8 D. 16
- \_\_\_\_ 4. Which of the structures is a L-form?
- \_\_\_\_ 5. Structure "B" is an example of an:  
A. Ketotetrose B. Aldotetrose C. Aldopentose D. Ketopentose

B. Multiple choices:

- \_\_\_\_ 1. Which of these is needed for photosynthesis to take place?  
A. Water B. Sunlight C. Chlorophyll D. All the above
- \_\_\_\_ 2. Which monosaccharide is an Aldohexose?  
A. Fructose B. Sucrose C. Galactose D. Ribose
- \_\_\_\_ 3. The disaccharide commonly called milk sugar is \_\_\_\_\_.  
A. Lactose B. Galactose C. Maltose D. Sucrose

\_\_\_\_\_ 4. Sucrose is made up of \_\_\_\_\_.  
A. Glucose & fructose    B. Glucose & galactose    C. Glucose & glucose  
D. Fructose & galactose

\_\_\_\_\_ 5. Which of the following is a branched chain starch?  
A. Amylopectin    B. Cellulose    C. Amylose    D. Sucrose

\_\_\_\_\_ 6. The greatest percentage of natural starches is \_\_\_\_\_.  
A. Amylose    B. Amylopectin    C. Glycogen    D. Cellulose

\_\_\_\_\_ 7. The storage form of carbohydrates in animals is \_\_\_\_\_.  
A. Amylose    B. Amylopectin    C. Cellulose    D. Glycogen

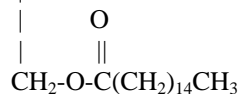
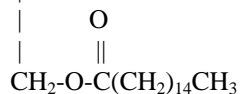
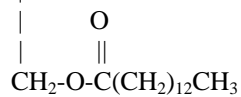
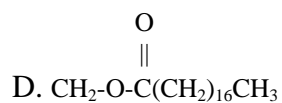
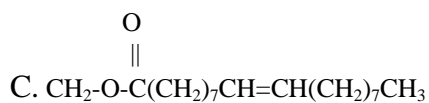
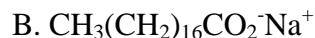
\_\_\_\_\_ 8. Which of the following polysaccharides can humans not digest?  
A. Glycogen    B. Amylose    C. Starch    D. Cellulose

\_\_\_\_\_ 9. Which of the following is commonly called malt sugar?  
A. Galactose    B. Lactose    C. Maltose    D. Sucrose

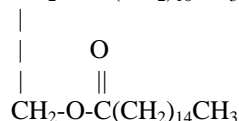
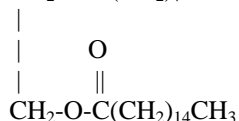
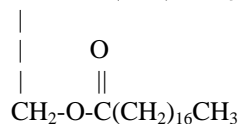
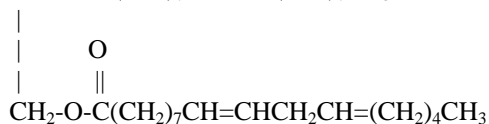
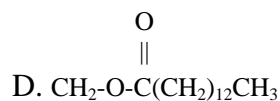
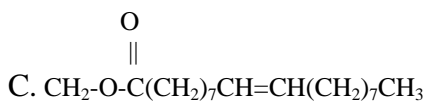
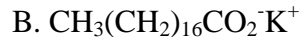
\_\_\_\_\_ \*\*10. The products of the hydrolysis of a lecithin are:  
A. Glycerol, phosphoric acid, fatty acids, and chlorine  
B. Glycerol, sphingosine, and fatty acids  
C. Glycerol, and fatty acids  
D. Glycerol, phosphoric acid, a fatty alcohol, and fatty acids

\_\_\_\_\_ \*\*\*11. A lipid that cannot be hydrolyzed:  
A. Wax    B. Steroid    C. Phospholipid    D. Plasmalogen

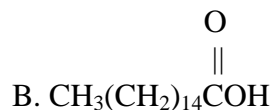
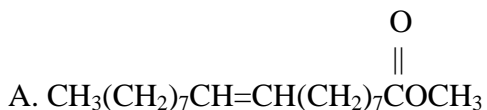
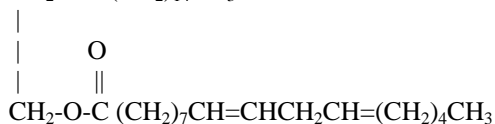
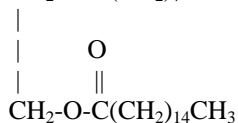
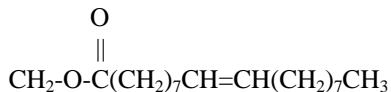
\_\_\_\_\_ 12. Which of these is the most abundant in an animal fat?



\_\_\_\_\_ 13. Which of these is the most abundant in vegetable oil?



\_\_\_\_\_ 14. What is one of the products of the hydrolysis of the following compound?



D. All of these forms

\_\_\_\_\_ 15. A polyunsaturated triacylglycerol could be converted into a saturated triacylglycerol by:

A. Hydration    B. Hydrogenation    C. Hydrolysis    D. Hyalation

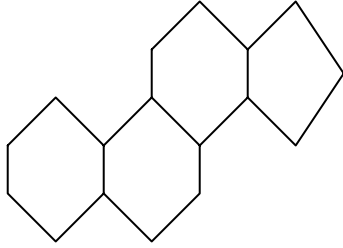
\_\_\_\_\_ 16. Animal fats react with KOH to form what mixture?

A. Glycerol and soap                      B. Glycerol and fatty acids  
C. Glycerol salt and fatty acids          D. Long-chain alcohol and fatty acids

\_\_\_\_\_ 17. Cephalin is:

A. Phosphatidyl glyceride                  B. Phosphatidyl choline  
C. Choilesteryl oleate                      D. Phosphatidylethanolamine

\_\_\_\_\_ 18. The following structural unit is present in:



- A. Steroid alcohols
- B. Testosterone
- C. Estradiol
- D. All the above

\_\_\_\_\_ 19. Cholesterol is needed by the body to make:

- A. Cell membranes
- B. Sex hormones
- C. Bile salts
- D. All the above

\_\_\_\_\_ 20. The fatty acid needed by the body to make prostaglandins is:

- A. Arachidonic acid
- B. Linolenic acid
- C. Palmitoleic acid
- D. Stearic acid