

## ORGANIC MOLECULE NOTES

### Carbohydrates

→ Made of the elements:

→ Always have a \_\_\_\_:\_\_\_\_ ratio of H to O (or H:O).

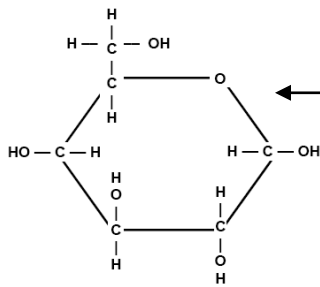
→ The building blocks of complex carbohydrates are:

→ Uses in organisms:

→ Specific examples with functions:

- 1.
- 2.
- 3.

→ Structural formula you will have to be able to recognize:



The name of this molecule is:  
Because of its single ring it is a \_\_\_\_\_ saccharide.  
It is important because:

→ Indicators for carbohydrates and color changes

*Lugol's Iodine solution turns from \_\_\_\_\_ to \_\_\_\_\_ when \_\_\_\_\_ is present.*

*Benedict's solution turns from \_\_\_\_\_ to \_\_\_\_\_ when \_\_\_\_\_ is present.*

→ Names of carbohydrates usually end in

→ Other facts:

# Lipids

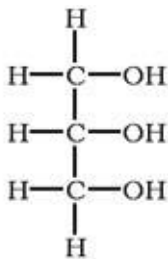
→ Made of elements:

→ Building blocks

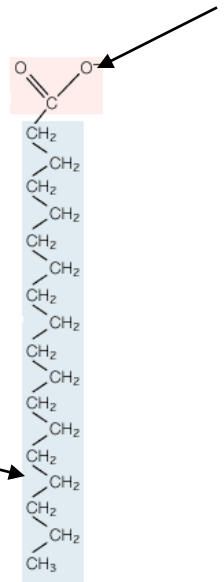
→ Uses in organisms (be sure to indicate what kinds of organisms)

→ Classes or types

→ Name these structural formulas:



Can you identify the “functional group shaded in pink?”



(the whole molecule)

What do chemists call compounds (or parts of compounds like the blue-shaded area) made of hydrogen and carbon??

→ What are some differences between saturated lipids and unsaturated lipids?

→ Other facts:

## Proteins:

→ Made of elements:

→ Building blocks

→ Uses in organisms (There are SOOOOOO many. List as many as you can)

→ Classes/types/Basic shapes

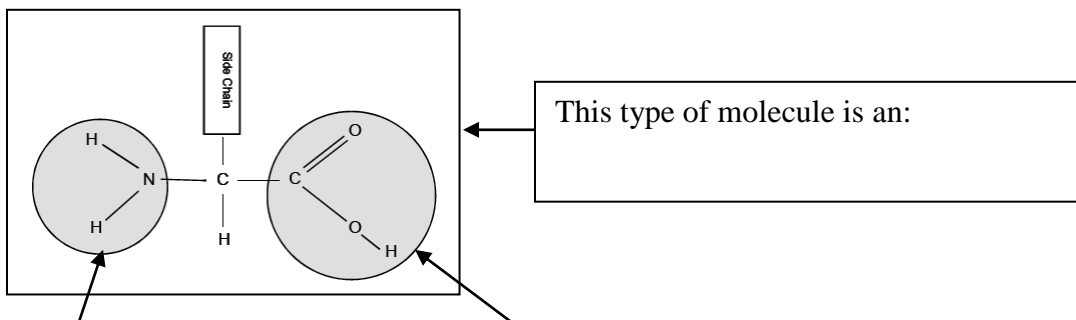
→ Specific examples with functions:

1.

2.

3.

→ Some structural formulas:



This functional group is an \_\_\_\_\_ group

This functional group is a \_\_\_\_\_ group.

Which other molecule in this packet has one of these groups as well?

Other facts: