

## Organic Compounds Lecture Notes

Fill out the study sheet and put it in your binder. It will help you later in the week with the review questions and to study for the test. This is the study sheet for all of the lectures this week.

### Organic Chemistry

Organic means \_\_\_\_\_ and is based on the element \_\_\_\_\_.

These molecules form \_(number) \_\_\_\_\_ bonds that are \_\_\_\_\_ type.

There are four organic polymers.

They are: 1) \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

4 \_\_\_\_\_

A polymer is a \_\_\_\_\_ molecule made up of many \_\_\_\_\_.

Definitions:

Polymer \_\_\_\_\_

Monomer \_\_\_\_\_

Dehydration \_\_\_\_\_

Synthesis \_\_\_\_\_

Hydrolysis \_\_\_\_\_

## Carbohydrates

These molecules store energy as \_\_\_\_\_ or \_\_\_\_\_. They form \_\_\_\_\_ structures.

Monosaccharide's \_\_\_\_\_

Disaccharides \_\_\_\_\_

Definitions:

Di \_\_\_\_\_

Mono \_\_\_\_\_

## Lipids and Fats

Lipids and fats store \_\_\_\_\_, make \_\_\_\_\_, and deal with \_\_\_\_\_.

Parts: describe and sketch

Glycerol \_\_\_\_\_

Fatty Acid \_\_\_\_\_

Phospholipids \_\_\_\_\_

Define:

Hydrophobic \_\_\_\_\_

Hydrophilic \_\_\_\_\_

“Ster” \_\_\_\_\_

## Proteins

Form four things:

1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

4) \_\_\_\_\_

Amino Acids are a \_\_\_\_\_ chain formed of complex molecules. They have four parts that determine what Amino acid it will be. The parts are:

1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

4) \_\_\_\_\_

Primary structure is \_\_\_\_\_. Secondary structure has two shapes that help determine the Amino Acid.

Alpha Helix:

Beta Pleated Sheet:

Tertiary Structure is the \_\_\_\_\_ shape.

## Nucleic Acid

Nucleic Acids have two main functions in the cell. They are 1) \_\_\_\_\_ and

2) \_\_\_\_\_. Nucleic Acids are made from \_\_\_\_\_. There

are three parts: 1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

Sketch a Nucleotide:

### Nitrogen Bases

DNA T \_\_\_\_\_

C \_\_\_\_\_

A \_\_\_\_\_

G \_\_\_\_\_

RNA U \_\_\_\_\_

C \_\_\_\_\_

A \_\_\_\_\_

G \_\_\_\_\_

Shape of DNA is \_\_\_\_\_ . The strands have an  
\_\_\_\_\_ arrangement. This means the strands -  
\_\_\_\_\_ .

Sketch the shape of DNA: