

## Biochemistry Chapter 4 Note Sheet

There are \_\_\_\_\_ different categories of Biochemical Compounds.

1. \_\_\_\_\_ these compounds are composed of \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_. They are a combination of \_\_\_\_\_ & \_\_\_\_\_.

They are used in the body for \_\_\_\_\_.

Examples of these compounds are:

They can be organized into three groups:

1.

2.

3.

Small molecules are combined to form larger molecules by a process called \_\_\_\_\_ by the removal of \_\_\_\_\_.

Large molecules are broken down to small smaller molecules by a process called \_\_\_\_\_ by the addition of \_\_\_\_\_.

Both these processes require \_\_\_\_\_ to take place.

2. \_\_\_\_\_ these compounds are composed of \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_. They are used in the body for \_\_\_\_\_ & \_\_\_\_\_.

Examples of these compounds are:

A basic fat molecule is composed of one \_\_\_\_\_ molecule and three \_\_\_\_\_ molecules. These are referred to as triglycerides.

A fat molecule looks like:

They can be organized into two groups:

1. \_\_\_\_\_ where the molecule contain all the hydrogen atoms that it can hold.

2. \_\_\_\_\_ where some of the hydrogen atoms are missing.

\_\_\_\_\_ fats are consider to be better for you to eat since they aren't absorbed by your body.

Fats are digested in your blood by \_\_\_\_\_. Too much \_\_\_\_\_ and \_\_\_\_\_ can buildup in the walls of an artery forming a plaque that may lead to a heart attack or stroke.

3. \_\_\_\_\_ these compounds are composed of \_\_\_\_\_,  
\_\_\_\_\_, \_\_\_\_\_ AND \_\_\_\_\_.

The building block of proteins are \_\_\_\_\_.

The chemical structure of an A.A. is:

Proteins are used in the body for \_\_\_\_\_ & \_\_\_\_\_.

Examples of these compounds are:

\*\*\*\*The most important type of proteins are \_\_\_\_\_\*\*\*\*

\_\_\_\_\_ control all the chemical reaction in your body.

Proteins can be organized into two groups:

1.

2.

The shape of a protein is very important to their function. If the shape is changed or  
\_\_\_\_\_ they will no longer work.

An example of this is:

4. \_\_\_\_\_ are very important molecules composed of \_\_\_\_\_.

These molecules make up the structure of \_\_\_\_\_ & \_\_\_\_\_.

\_\_\_\_\_ is for the storage of genetic information.

\_\_\_\_\_ is for the transfer of genetic information.

The basic building block of nucleic acids are \_\_\_\_\_

They look like:

There are five different \_\_\_\_\_.

The different nitrogenous bases are :

In DNA \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

In RNA \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ always connects with \_\_\_\_\_

\_\_\_\_\_ always connects with \_\_\_\_\_

\_\_\_\_\_ always connects with \_\_\_\_\_

\_\_\_\_\_ always connects with \_\_\_\_\_

The shape of DNA is:

The shape of RNA is: