**Organic molecules Name Period**

* Compounds containing the element **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**(C)
* Usually associated with \_\_\_\_\_\_\_\_\_\_\_\_things
* Other elements commonly found in \_\_\_\_\_\_\_\_\_molecules:

\_\_\_\_\_\_\_\_\_\_\_ (H) \_\_\_\_\_\_\_\_\_\_\_\_ (O) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_N)\_\_\_\_\_\_\_\_\_\_\_\_\_Phosphorus (P)\_\_\_\_\_\_\_\_\_\_\_\_\_\_Sulfur (S)

**4 main groups of organic molecules**

1. Carbohydrates 2. 3. Proteins 4.

Organic molecules are most often considered “**macromolecules**” macro =

* Monomers join together in a reaction called “dehydration synthesis”. (dehydration = water loss) (synthesize = combine)

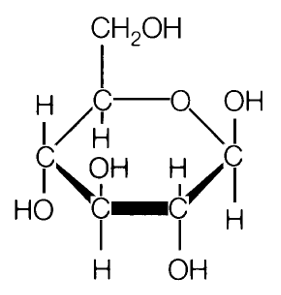
-So when larger molecules are formed is

* The opposite of synthesis is called “ ” (requires water)
* Some organic molecules, like lipids, are said to be  they **will not mix** with water
* Other organic molecules are  they mix with water

**Carbohydrates:** Made of ONLY Carbon, , and

Sugars -

-Monosaccharides= “single sugars” (ex- )



-Disaccharides= “ sugars” (ex.- sucrose, table sugar)

Sugars are for energy

Starch (plants) and Glycogen (animals)-

-Polysaccharides= “ sugars”

Stored Energy (broken down into sugars later

Glycogen is stored in the . Starch is stored in , grains and

Cellulose- Found ONLY in

-Structural (makes plants rigid)

-Indigestible by (“fiber”)

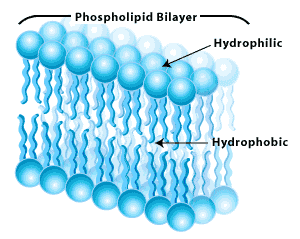
**Lipids :** Made of: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **Fats and Oils**

**- energy storage**

**-Made of 1 molecule & 3 fatty acid --🡪 Triglycerides**

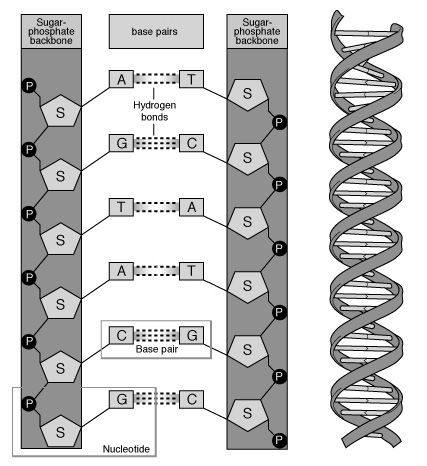
* Waxes are repellent



* Phospholipids - membranes
* Steroid hormones
* -chemical control of some body functions
* -made from

**Proteins: Made of:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* over the dry weight of your body
* **VERY**  with complex 3-dimensional structures
* made of combinations of **20** different  **acids**
  + perform **MANY** functions:
    - Movement )
    - Structure ( )
    - Chemical Regulation ( )
    - Defense ( )
    - Transport ( )



* + - Nutrition

**Nucleic Acids Made of\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Made of units called **nucleotide**

1. DNA- forms the code (codes for proteins)

2. RNA- vital part of building process

