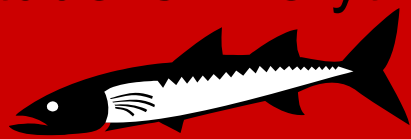


Attitude is Everything!



Wed, Sept 20, 2017

Pick up: none

Today you will:

1. Review Carbon CN pg 23
2. Discuss the four macromolecules-fill in chart as we go through notes.

Homework/Planner:

Mark the text pgs 14

CARBON Notes

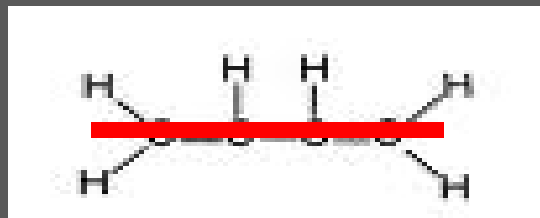
- It is the **basic building material of life**
 - It is **Organic** = contains Carbon
- **Chemical basis** for all molecules in living things.
 - *Required in almost every stage of development*
 - *Delivers stored energy to cells.*
 - *DNA is written in a carbon script.*
 - *Every part of body contains & requires large amounts*
 - *The oil in our hair, the fat in our gut, skin, & other tissues are made of it*
 - *Used as building block for many complex & important life processes.*
 - *Carbon in our bodies brings the many diverse atoms together & makes them perform activities that benefit growth in a cohesive manner!*

Sources of Carbon

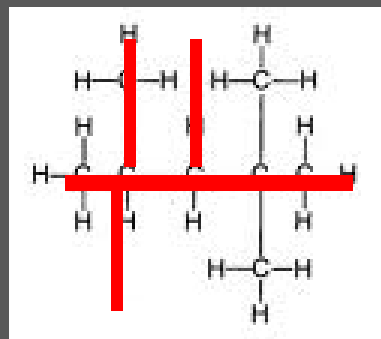
- CO₂ in air from respiration
- Dissolved in water
- Fossil fuels underground – oil, natural gas, coal
- Dead organic matter in ground
 - Humus = dark, rich soil (rich w/ dead organic matter)

3 Shapes of Carbon

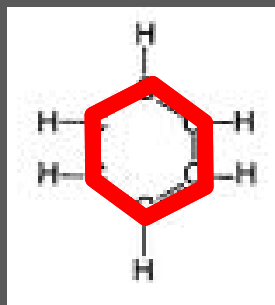
1. Straight chains



2. Branched chains



3. Rings

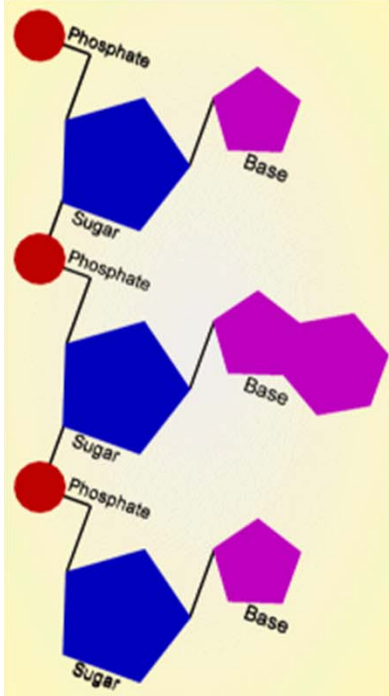


MONOmer vs POLYmer

Polymers

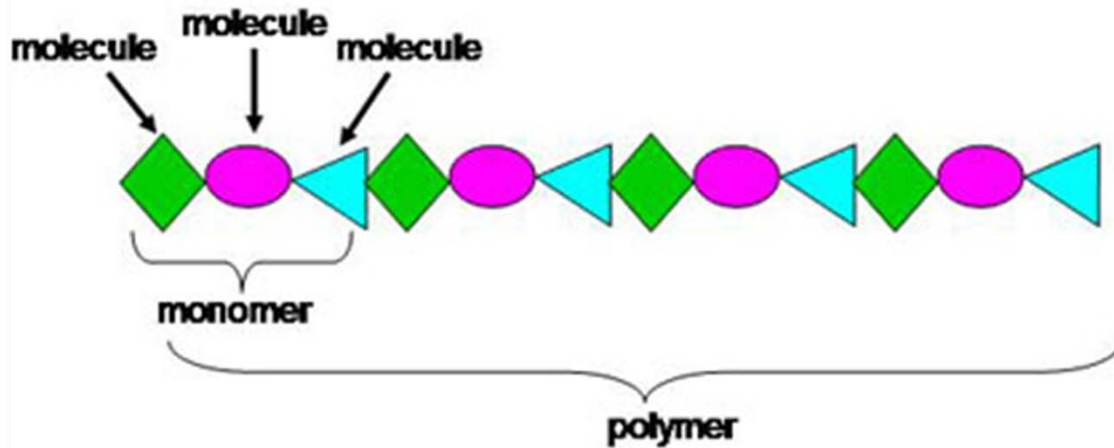
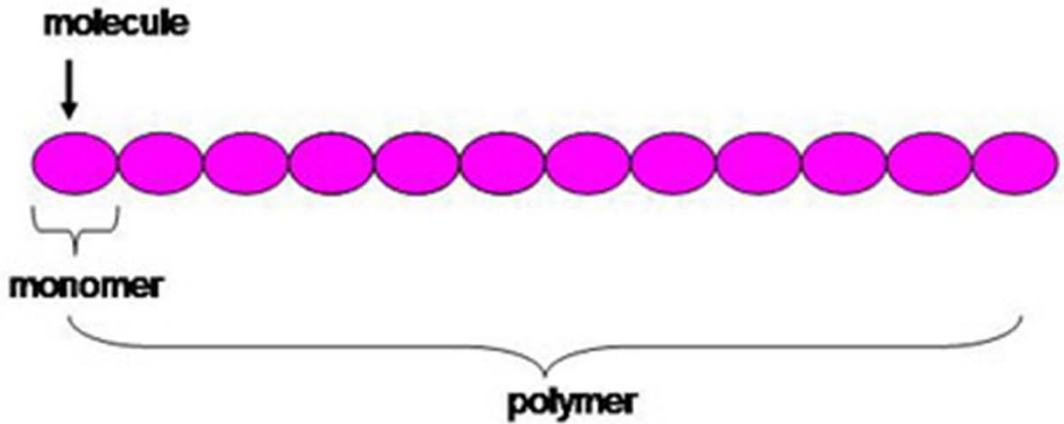
Are made up of many small, repeating molecular units known as


Monomers



Polymer

Monomer





MACRO MOLECULES

CARBOHYDRATES

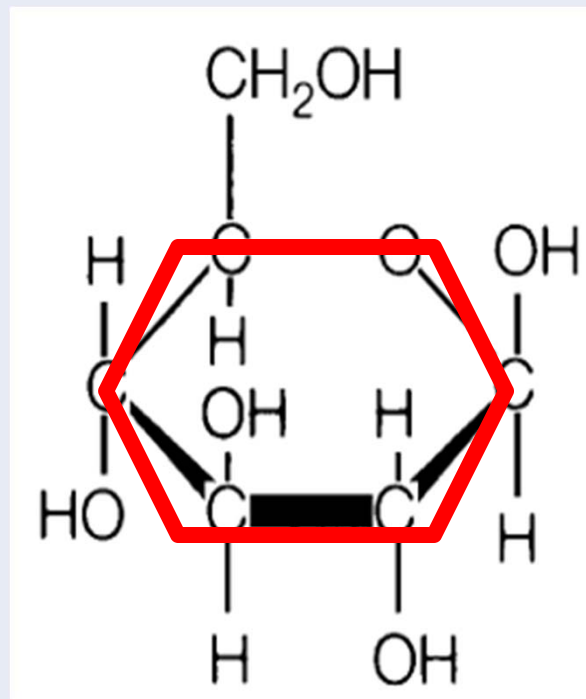
- Includes examples like
- Starches, sugars:
 - Potatoes, grains, breads, pasta, simple sugars
- Are important because:
 - lots of quick energy!
 - Plants → Forms cell walls & supports plants
 - Cell-to-cell communication



Basic Shape & Key Words!

Carbohydrates

- Hexagon
- End in -ose



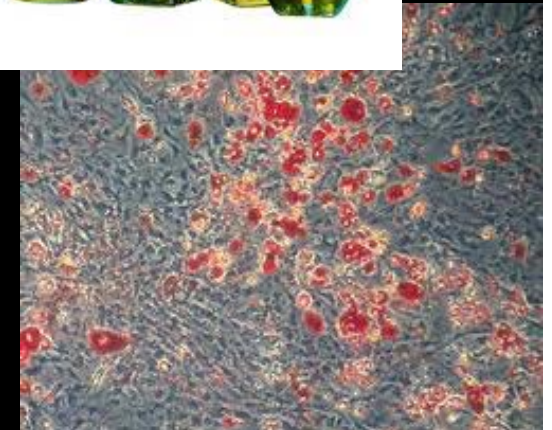
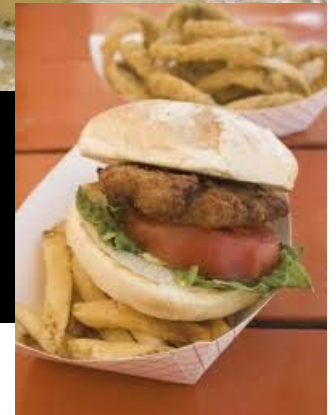
LIPIDS

- Includes examples like:

- fats, oils,
cholesterol

- Functions :

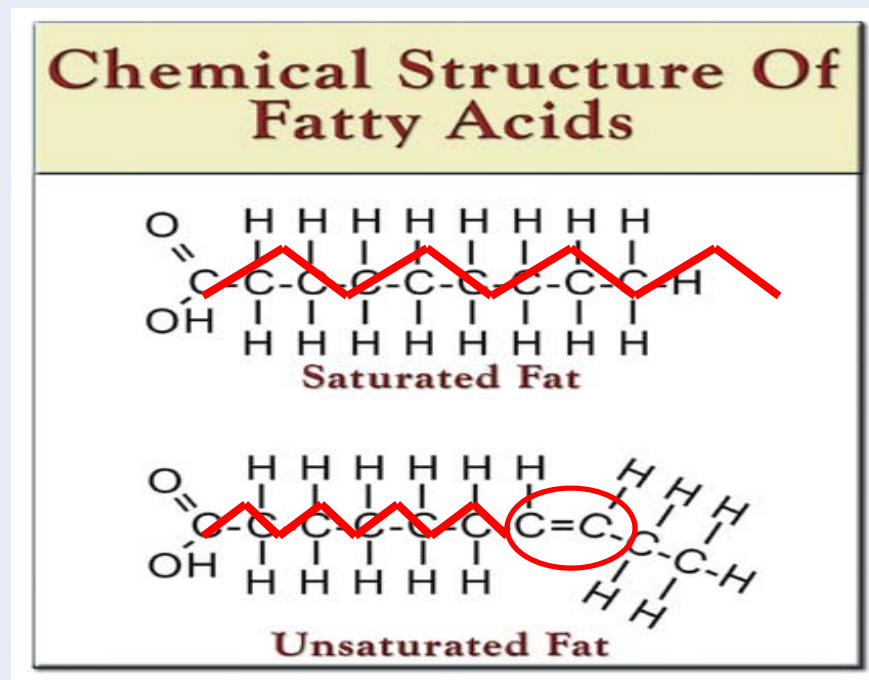
- source of usable energy for cells (LONG term)
- part of cells structure → **Cell Membrane!**
- **Cholesterol good – regulates response to stress; testosterone, estrogen**



Basic Shape & Key Words!

Lipids

- Long Chains w/ tails



UNsat = at least ONE C=C double bond