

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Biological Molecules- You Are What You Eat

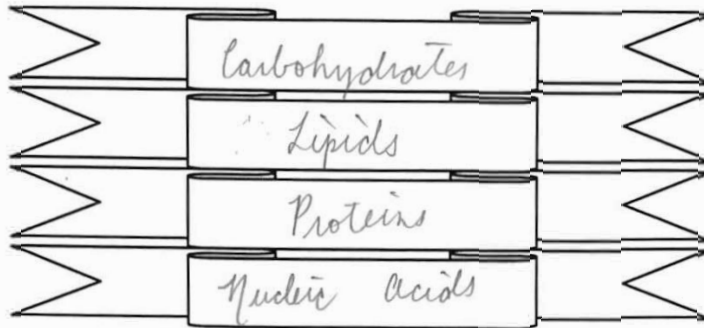
This worksheet goes Crash Course Biology found on youtube

<http://www.youtube.com/watch?v=H8WJ2KENIK0>

### Biological Molecules:

These are the molecules necessary for every living thing on earth to survive...

They are ...

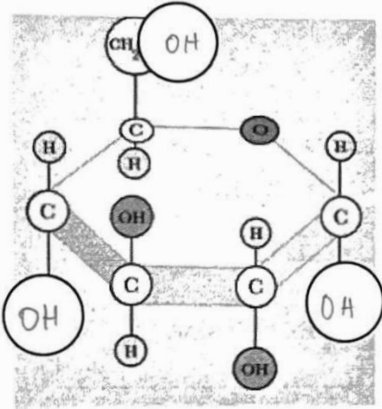


### Carbohydrates [3:00 - 7:00]

#### Monosaccharides

- Mono = one
- Saccharide = sugar

Example: Glucose Molecule Fill in the Bubbles



Disaccharides have 2 sugars. An example is sucrose (glucose + fructose)

- Di = two

Polysaccharides have many sugars

- Poly = many/thousands/multiple
- Animals store their energy in glycogen. It is made up of glucose left over from what we eat. It's generally a short term store.

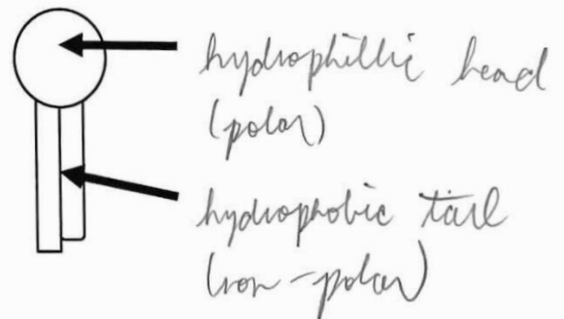
### Lipids [7:00-10:45]

They are made of two ingredients; glycerol and fatty acid

type of fat	state at room temp. (solid/liquid/ gas)	Shape (straight/bent)
Saturated fat	<u>solid</u>	<u>straight</u>
Unsaturated fat	<u>liquid</u>	<u>bent</u>

Phospholipid makes up the cell membrane walls

Label the phospholipid on the right



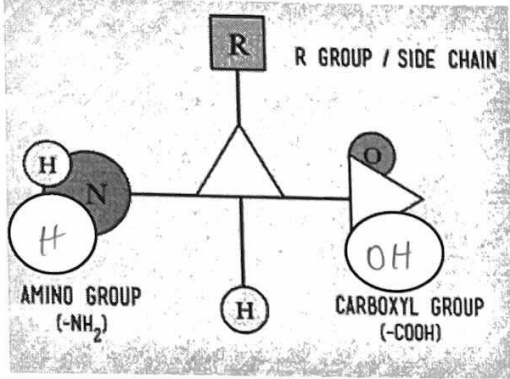
**Proteins: [10:45-13:30]**

List 3 Examples/Functions of protein:

- *enzymes* regulating chemical processes helping you digest food
- *antibodies* connecting themselves to invaders like bacterium and viruses
- *protein hormones* to feel emotions

Proteins are made using only 20 (number) different ingredients called amino acid (AA)

Fill in the bubbles



When you get a bunch of these amino acids together you make a long chain called polypeptides (there's that prefix poly again!)

**Triple Decker sandwich:**

Ingredient	Biological molecule it contains	Importance of biological molecule	building blocks of molecule
bread	<i>carbohydrates</i>	<i>source of energy</i>	<i>monosaccharide</i>
peanut butter	<i>lipids</i>	<i>storage of energy</i>	<i>glycerol + fatty acid</i>
egg	<i>protein</i>	<i>repair muscles + bones, make hormones + enzymes, used as an energy source</i>	<i>amino acid</i>