

Biology
Scientific Method
2012 - 2013
#3

- I. Organic compounds = compounds found in living things
 - contain the element carbon (C)
 - also contain H,O,P,N,S

- A. **Carbohydrates** = sugars and starches
 - 1. monosaccharides = simple sugar building blocks
 - glucose = found in the blood
 - fructose = found in fruit
 - galactose = found in milk
 - 2. disaccharides = 2 monosaccharides “hooked” together
 - sucrose = found in candy
 - lactose = found in milk
 - maltose = found in seeds
 - 3. polysaccharides = many monosaccharides “hooked” together
 - glycogen = stores starch (energy source) in muscle
 - starch = stores sugar (energy source) in plants
 - cellulose = provides support in plants
 - chitin = provides support in animals (insects, crustaceans)

B. **Lipids** = fats, oils , waxes

1. saturated = contains the maximum number of hydrogen (H) atoms

- solid at room temperature
- come from animal sources
- “bad for you

2. unsaturated = does not have the maximum number of hydrogen (H)

- liquid at room temperature
- come in plant sources
- “good” for you

C. **Proteins** = made up of repeating units of amino acids held together by peptide bonds

1. make up enzymes = act as catalysts to speed up reactions

2. contain large amounts of nitrogen (N)

D. **Nucleic acids** = made up of repeating units of nucleotides

1. DNA = found in the nucleus of cell

2. RNA = found outside the nucleus of cells