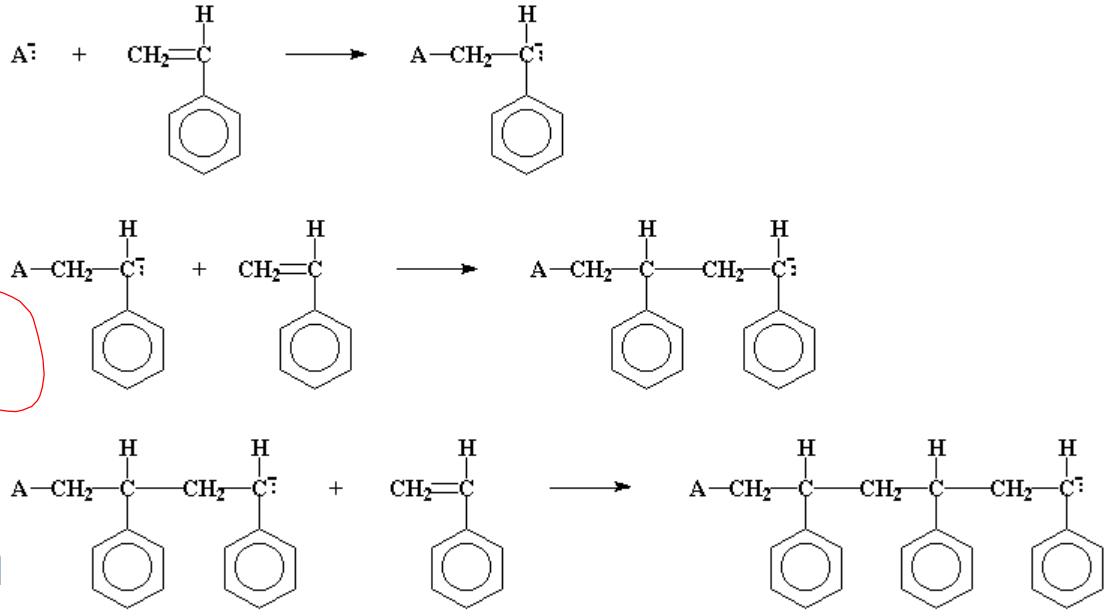
Biochemical Compounds

Molecules of Life

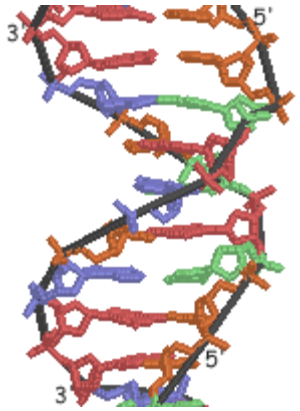
Polymers

- Common
- Made of identical smaller pieces hooked together
- Polymerization



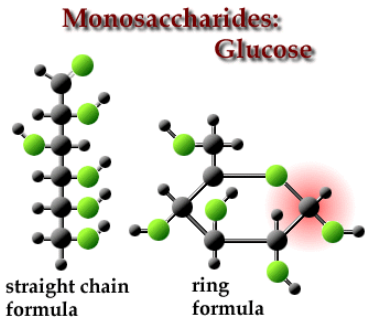
Four Main Compounds

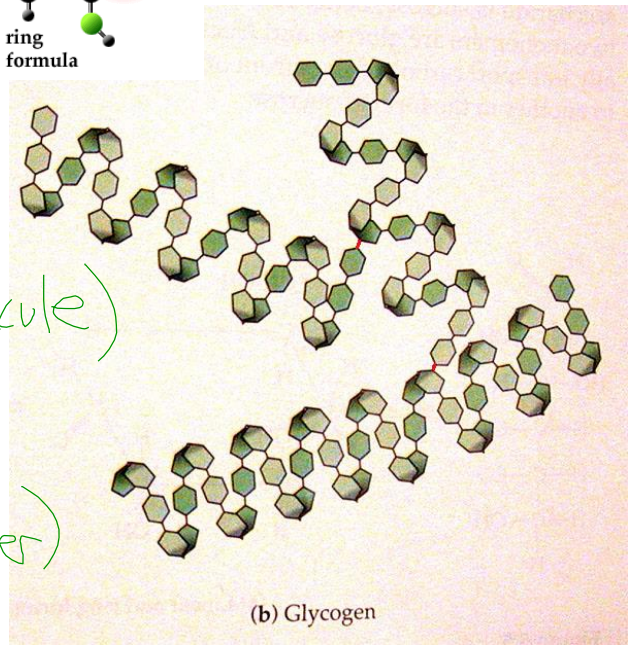
- Carbohydrates
- Lipids (Fats)
- Proteins
- Nucleic acids



Carbohydrates

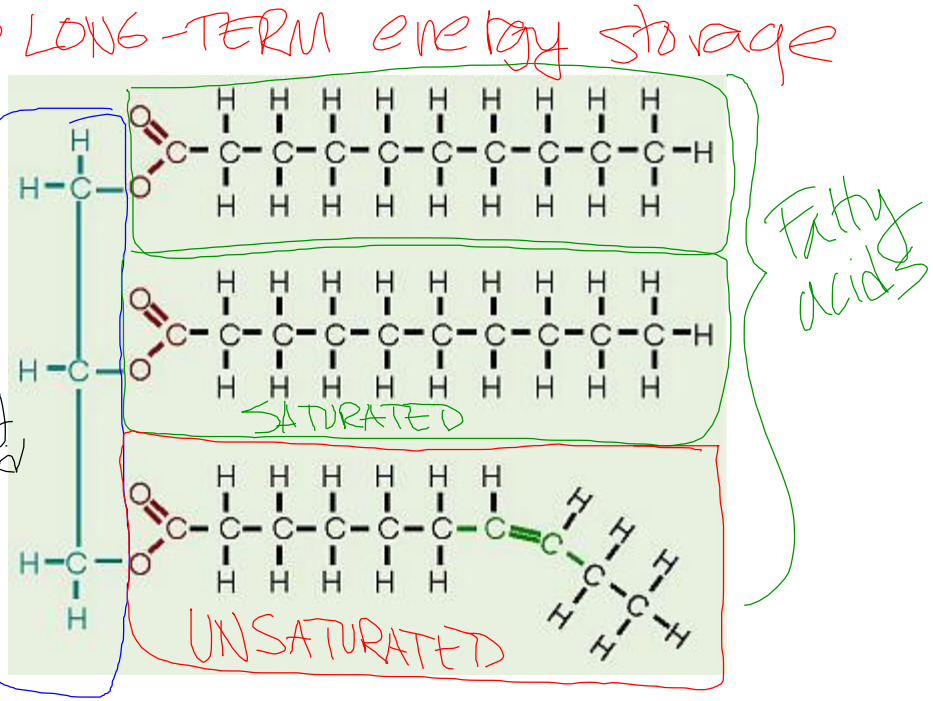
- Sugars and starches
- Made of carbon, hydrogen, oxygen
- Used for energy QUICK
- Monosaccharides – simple sugars (single piece of sugar molecule)
- Polysaccharides – starch and glycogen (storage) (multiple pieces of sugar hooked together)





Lipids

- Fats, waxes, oils (liquid)
- Excellent for energy storage
- Saturated vs. Unsaturated



more likely to be solid

more likely to be liquid

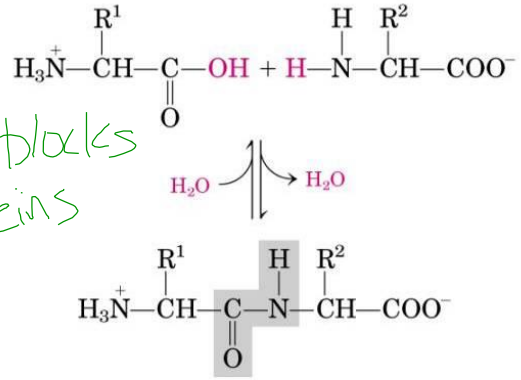
Carbons are hooked to 4 things

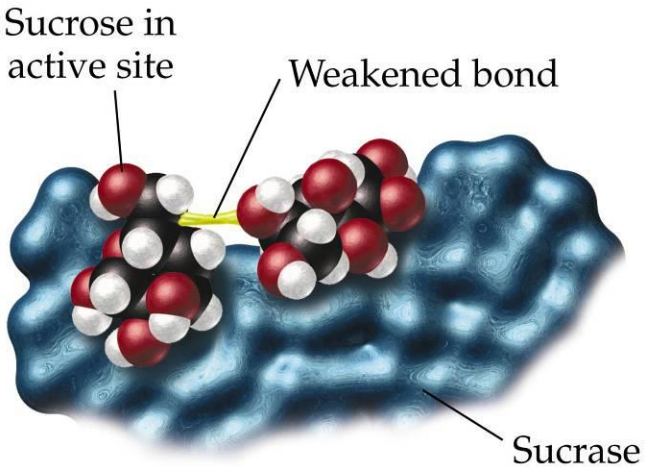
at least 2 carbons could be hooked to one more thing

Glycerol backbone (kind of carbohydrate)

Proteins

- Made of amino acids joined by peptide bond
- Used for structure, as enzymes, and more
- Enzymes are catalysts for chemical reactions

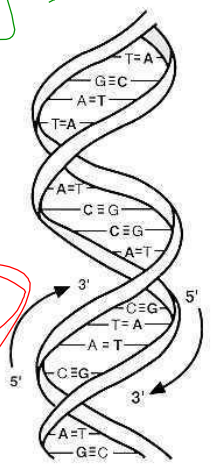




Nucleic Acids

- Made from nucleotides
- RNA and DNA
- Used to store genetic information

building block of nucleic acids



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