

Molecules of Life SUMMARY

BioMolecule (Macromolecule)	What are its Building Blocks?	What is its Shape?	What atoms are found in it?	What does it do? (It's Function)	Additional Information
		Ring			
	Amino Acids		Carbon, Hydrogen, Oxygen, Nitrogen, and Phosphorus		DNA is the recipe for this
		Hydrophilic Head & Hydrophobic Tail			Cell Membranes are made of this
			2 Hydrogens and 1 Oxygen		Adhesion = Cohesion =

MACROMOLECULES

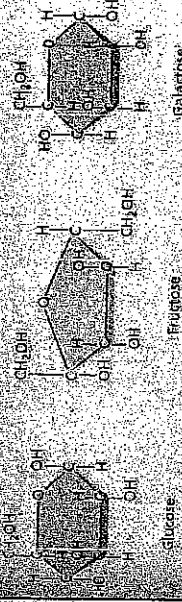
CLASS

DESCRIPTION/CHARACTERISTICS

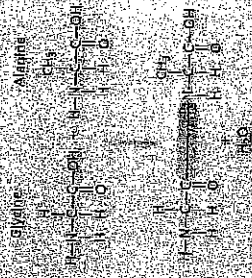
- Organic compound composed of carbon, hydrogen, oxygen ratio of 1:2:1
- Monomer is monosaccharide $(CH_2O)_n$, where n is any whole number from 3 to 6, commonly 3, 5, or 6
- Animals store glucose in form of polysaccharide glycogen and plants do the same in form of starch
- Formed from linkage of amino acids, form covalent bond and release a water molecule
- Long chains called polypeptides; proteins formed from one or more
- R groups linked to amino acid determines shape, which allows for different activities in living things
- Triglycerides — three molecules of fatty acids with one molecule of glycerol
- Phospholipids — same as triglyceride, only two fatty acids
- waxes — structural lipid, long fatty acid joined to long alcohol chain
- Steroids — composed 4 fused carbon rings with varied functional groups attached
- Large, complex organic molecules — store, transfer info in cell
- DNA — contains information, determines characteristics of organism and directs cell activities
- RNA — stores, transfers info from DNA essential for manufacturing of proteins; acts as enzymes
- Both made of nucleotides (thousands of linked monomers)

CARBOHYDRATES

DIAGRAM



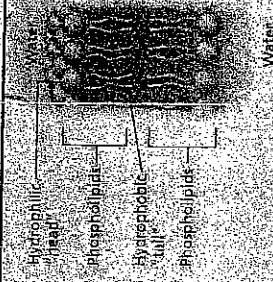
Most common monosaccharides



PROTEINS



LIPIDS



NUCLEIC ACIDS

