C:\Program Files\Microsoft Office\Media\CntCD1\ClipArt3\j0237945.wmfBiology 1 Name:

***Organic Molecules at a Glance***  Date:

|  |  |  |  |
| --- | --- | --- | --- |
| ***Organic Macromolecule*** | ***Monomer(s)***  ***(& examples)*** | ***Polymer(s)***  ***(& examples)*** | ***Function(s)*** |
| *Carbohydrates* | Monosaccharides  C6H12O6  Glucose, Fructose, Galactose | Disaccharide  Sucrose  Lactose  Maltose  Polysaccharide  Cellulose  Chitin  Starch  Glycogen | Energy – 4 cal/g  Structure  Cell wall |
| *Lipids* | Fatty Acids  Saturated & Unsaturated | Triglycerides  Phospholipids  Steriods/Hormones | Energy – 9 cal/g  Structure  Cell Membrane  Hormones – chemical messengers |
| *Proteins* | Amino Acids  (there are 20 – see chart in notes) | Protein (polypeptide)  Ex – hemoglobin, actin, myosin, atigens  Note: heat & pH will cause protein to denature (lose shape – unravel – lose function) | Energy – 4 cal/g  Structure  Cell ID  Muscle  Enzymes – speed up chemical reaction |
| *Nucleic Acids* | Nucleotides  4 in DNA – A, T, G, C  (sugar, phosphate, nitrogen base) | Nucleic Acid  DNA & RNA | Stores/Transmits genetic information – instructions for building protein – see “Genetic Code” |

Hour:

|  |  |  |
| --- | --- | --- |
| ***Organic Macromolecule*** | ***Monomer***  ***(sketch & label the structure)*** | ***Polymer***  ***(sketch & label the structure)*** |
| *Carbohydrates* | Use your Organic Macromolecules – Monomers & Polymers  Study Guide to fill in this page. |  |
| *Lipids* |  |  |
| *Proteins* |  |  |
| *Nucleic Acids* |  |  |