

Organic Molecules Poster

- Title your poster “Organic Molecules Necessary for Life”
- Divide your Poster into four section and give each section the following headings:
 - Carbohydrates
 - Lipids
 - Proteins
 - Nucleic Acids

Title	
Carbs	Lipids
Protein	NA

- For each section create a flip book that will contain the following information (Make each bulleted topic a title for each page of your flip book):
 - ❖ Carbohydrates:
 - **Monosaccharides**- Diagram the ring form of D-Ribose, Alpha-D-Glucose, Beta-D-Glucose (list their uses)
 - **Disaccharides**- Diagrams of Sucrose, Lactose, and Maltose (list where they are found)
 - **Polysaccharides**- Print 3D images of Cellulose, Starch (include Amylose and Amylopectin), Glycogen (list functions)
 - **Human Health Issues**- Describe 2 from topics on sugar
 - ❖ Lipids
 - **Types of Lipids** – Diagram and list functions of Triglycerides, Phospholipids, Waxes, Steroids, Fats, Oils
 - **Monomers of Triglycerides**- Diagram
 - **Fatty Acids**- Diagram saturated, monounsaturated, and polyunsaturated forms
 - **Human Health Issues**- Describe issues with Trans Fats and Saturated Fatty Acids
 - ❖ Proteins
 - **Amino Acids**- Diagram an example of Amino Acid structure (explain R group)
 - **Peptide Bonds**- Diagram the formation of a peptide bond
 - **Protein Structure**- Diagram the 4 levels of protein structure
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 - **Uses and Functions**- Use Rubisco, insulin, immunoglobulins, rhodopsin, collagen, spider silk
 - **Current Models**- Print 3D images of 2 proteins, list where found, and their function
 - ❖ Nucleic Acids
 - **DNA**-Diagram and label the molecular structure of DNA using circles for phosphates, pentagons for pentose sugars, and rectangles for nitrogen bases
 - **RNA**-Diagram and label the molecular structure of RNA using circles for phosphates, pentagons for pentose sugars, and rectangles for nitrogen bases
 - **3 Differences**- List the three differences between DNA and RNA
 - **Uses and Functions**- Describe how DNA and RNA are used
 - **Sequencing Use**- Describe current or future use of DNA sequencing information