

## Macromolecule Graphic Organizer Foldable

*Directions:*

### Outside

1. Fold one sheet of plain paper in half (hot dog style). Fold in half two more times to create 4 tabs.
2. Cut each crease and colorfully label the outside with the following:
  - Carbohydrates
  - Lipids
  - Proteins
  - Nucleic Acids
3. Provide a color illustration or picture of at least one food in which the first three can be found. Provide an illustration of where a nucleic acid can be found.

### Inside

4. Use the PowerPoint lecture to complete the inside of the foldable.
5. On the back of each tab provide an illustration of what the molecule looks like.

*Inside KEY:*

### Carbohydrates

Monomers: monosaccharides (simple sugars)

Elements: C, H, O – 1:2:1 ratio

Types: monosaccharides, disaccharides, polysaccharides

Examples: glucose, galactose, fructose (mono)

Sucrose, lactose, maltose (di)

Glycogen (animal), cellulose (plants) (poly)

Function: provide energy, structural purposes

### Lipids

Monomers: fatty acids

Elements: C, H, O

Types: Triglycerides (oils& fats), Phospholipids (waxes), steroids

Examples: olive oil, lard, ear wax

Function: energy, biological membranes

### Proteins

Monomers: amino acids

Elements: C, H, O, N

Examples: Enzymes, hemoglobin

Function: hormones, speed up reactions, transport substances, fight diseases

### Nucleic Acids

Monomers: nucleotides

Elements: C, H, O, N, P

Types: DNA, RNA

Function: DNA – stores genetic information; RNA – builds proteins