

Biochemical Compounds

Biology

In pairs, build models of the following compounds out of construction paper and manila folders. For each molecule, use Wikipedia, Google, or another web resource to help you make the basic shapes of the compounds. (You should make detailed representations of the **structures** – what do these compounds look like? – that correspond to the basic shapes of the real compounds.) On the back of your model, write what the compounds are used for in living organisms. Make sure to include all the parts specified for each compound. On the back of your models, write a brief description of the **function** of each of the compounds.

Neatness, care of construction, and attention to detail will all contribute to your grade (although artistic ability will not!).

Carbohydrates:

Show the simple polysaccharide carbohydrate sucrose – make sure to show the component monosaccharides glucose and fructose.

Lipids (Fats):

Show at least one saturated fatty acid and at least one unsaturated fatty acid. Include the glycerol component. All three fatty acids and the glycerol component should be made from separate pieces of paper.

Proteins:

Show at least two amino acids. Each amino acid and each peptide bond should be made from separate pieces of paper.

Nucleic Acids:

Show an DNA molecule containing all four nucleotides. Each nucleotide should be made from a separate piece of paper.

One person from each group will be asked to explain one of their models – so make sure that each member of your group has a good understanding of all the models you've made!