

**Macromolecules**

1. Polymers are formed by polymerization, large compounds built by joining smaller ones together.
2. All macromolecules contain the element carbon.
3. The word mono- means one.
4. The four macromolecules are carbohydrates, lipids, proteins, and nucleic acids.
5. The monomer for proteins is amino acid.
6. The function of carbohydrates to provide energy for all living things.
7. An amine group is a compound made up of an amino group on one end and a carboxyl group on the other.
8. A saturated fat is a fatty acid that contains the maximum amount of hydrogen atoms.
9. Large molecules formed from monosaccharides are called polysaccharides.
10. Examples of carbohydrates are bread and pasta.
11. The function of nucleic acids is to store and transmit genetic information.
12. For each of the following macromolecules, list the elements found in each.
  - a) proteins - C H O N
  - b) lipids - C H O
  - c) nucleic acids - C H O N P
  - d) carbohydrates - C H O
13. Which <sup>macromolecule</sup> ~~element~~ has a 1:2:1 ratio of carbon, hydrogen, and oxygen? carbohydrates
14. lipids stores energy, makes up the cell membrane, and acts as a chemical messenger.
15. Dehydration synthesis is the process of water leaving a molecule.
16. What are two functions of protein? catalysts and build muscles, fight disease
17. A nucleotide is made up of a 5-carbon sugar, phosphate group, and a nitrogenous base.
18. Two examples of lipids are fats and oils.
19. The monomer of carbohydrates is monosaccharide.
20. Glycerol and fatty acids are the monomers of lipids.