

Chapter 3 Keys to Success

What is the proper chemical definition of organic?

What are the four classes of organic biomolecules in nature?

Why is carbon such an important player in the creation of the biomolecules?

What attributes does a functional group confer to a molecule?

What is the relationship between monomers and polymers?

What role do enzymes serve?

What is the most main role of carbohydrates? What is the ratio of carbon-hydrogen-oxygen in the chemical formulas?

What groups of carbohydrates are sugars? What are examples from these groups of common sugars?

What are the 5 common polysaccharides in nature and what is the role of each?

What is the solubility of lipids?

What is the role of fats and oils? What is the key difference between the two?

How do we define unsaturated, saturated and trans fats?

What makes phospholipids chemically different than most lipids and what structures can be made as a result?

What does a general skeleton of a steroid look like? What are these steroids used for in humans?

What group of lipids are the most water resistant?

What is the monomer of protein? What kind of bonds joint these monomers?

What are at least 6 roles of proteins?

Describe the four levels of proteins structure.

What are the two type of nucleic acids? What nucleotides are found in each?

How do the two strands found in a DNA molecule stick together?

What does ATP stand for? What properties allow ATP to do its job?