



3.1 Biological Molecules

Biological molecules

Polymers and monomers

You will learn a what monomer and polymer is and the named reactions needed to make these molecules

Saccharides

You will learn the names and structures of mono, di and polysaccharides along with their functions.

Lipids

You will learn the structures, bonds and functions of the different types of lipids along with the test to identify lipids

Proteins

You will learn the structures, bonds and functions associated with proteins along with the test to identify this molecule

Enzymes

You will learn how models of enzyme activity has changed over time along with the factors that affect the rate of enzyme activity

Nucleic acids

You will learn about the differences between DNA and RNA and how each molecules is used

ATP

You will learn how ATP is used in organisms and how the structure relates to the function

Water

You will learn how the structure water relates to the 5 properties of water that are important for life

Inorganic ions

You will learn how inorganic ions are used as biological molecules

VOCABULARY

Monomer
Polymer
Condensation
Hydrolysis
Saccharides

Glycosidic
Ester
Peptide

This module introduces new concepts only briefly studied in GCSE. This module will build your knowledge of biological molecules such as carbohydrates, proteins, lipids and water to understand the importance of these molecules to living organisms.

This module builds on your understanding of testing of biological molecules from Key Stage 4 and builds to incorporate your knowledge of bonding from chemistry.