

Chapter 3 Review

1. Hydrocarbons contain **hydrogen** atoms bound to **carbon** atoms.
2. Carbon atoms have four electrons always have **covalent** bonds between them.
3. What are the four most important biological molecules? **Carbohydrates, Lipids, Proteins ,Nucleic Acids**
4. In dehydration synthesis water is **removed** and joins **monomers** to form **polymers.**
5. In hydrolysis reactions water is **added** and breaks **polymers** into **monomers.**

Carbohydrates

1. Carbohydrates are used for energy source such as the monosaccharide **glucose.**
2. Some monosaccharides such as **deoxyribose** and **ribose** are found in nucleotides of DNA and RNA.
3. The molecular formula for glucose is **C₆H₁₂O₆**
4. Polysaccharides are energy source molecules. The most important one found in our body is **glycogen**, which consists of **glucose** subunits. Plants store glucose as **starch or cellulose.**

Lipids

1. Lipids are insoluble in water because they lack **hydrophilic** functional groups.
2. Triglycerides are composed of **fatty acids** and **monoglycerides.**
3. Where are triglycerides found? **Fat**