



Our country, our future

Chapter 1: Introduction to Organic chemistry

Teacher: Dr. Bbosa Science 0776 - 802709, 0700 - 36 83 84

What is organic Chemistry

Organic is the study of the chemistry of carbon. Carbon out of 112 elements of the Periodic Table forms a branch of chemistry called organic chemistry; it must be unique.

Uniqueness of carbon

Carbon **forms very many useful** compounds of different chemical and physical properties.

Uses of organic compound

Organic compounds are used for making:

- Plastic chairs,
- Plastic tables,
- drugs,
- perfumes
- pens
- paper
- Herbicides.

Terminologies

1. Hydrocarbons

These are compounds that contain carbon and hydrogen only.

2. Functional groups

Is an atom or groups of atoms that impart chemical properties to organic compounds. For instance, a double bond in alkenes ($-C=C-$), a triple bond in alkynes ($-C\equiv C-$), hydroxyl group

For [notes, exams, marking guides and more](http://digitalteachers.co.ug) in all subjects from s1 to s6: digitalteachers.co.ug

in alcohols (-OH), a halogen atom in alkylhalides, carbonyl (-CO-) group and a carboxylic group (-COOH).

3. **Homologous series**

is a group of organic compounds that

- (i) Can be represented by similar general formula,
- (ii) Have similar functional group and hence similar chemical properties
- (iii) Are prepared by similar chemical methods
- (iv) show varying chemical properties. For instance, members of a given homologous series may vary from gases to liquids to solids.