



# Carbon Chemistry

- 1
- 2
- 3
- 4
- 5



## Bonding





# The Rotational Single Bond

1 2 3 4 5

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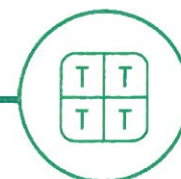


e.g.

•

e.g.

ALWAYS find the largest C-chain, highlight it, and then add side chains/functional groups to your name.



TT TOP TIP







# I.U.P.A.C. Nomenclature

1 2 3 4 5

## The Longest Carbon Chain

Number of Carbon atoms      1      2      3      4      5      6      7      8      9      10

e.g.



## Alkyl Side Chains

## Functional Groups

## Numbering System

e.g.

e.g.

e.g.

e.g.





# The Numbering System

1 2 3 4 5

.

.

e.g.

e.g.

e.g.

e.g.

Naming is in ALPHABETICAL  
order, not NUMERICAL  
order!



WARNING



# Key Terms in Organic Chemistry.

1 2 3 4 5

Aliphatic

Aromatic

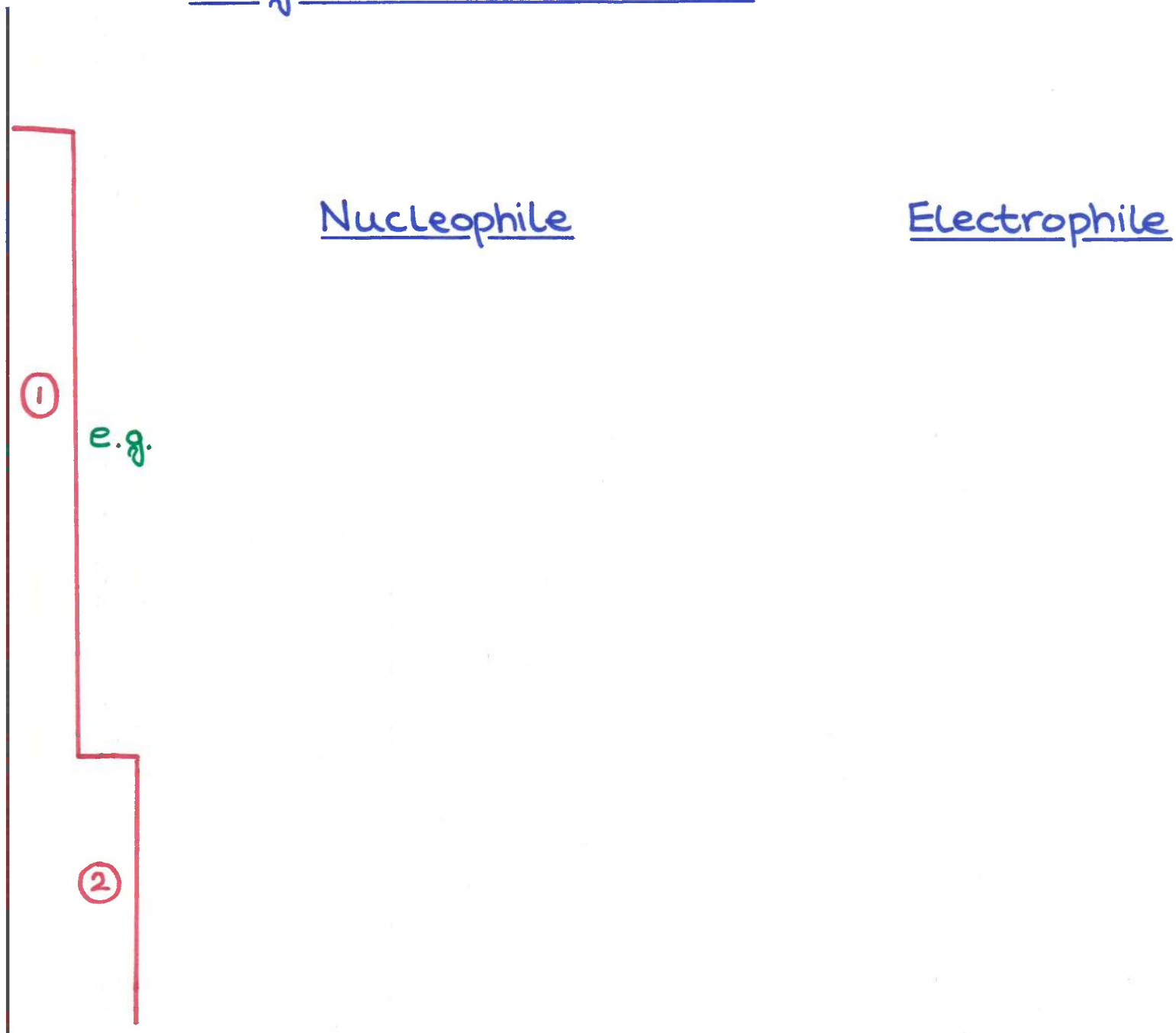
Functional  
Group

Homologous  
Series

Isomer



# Organic Mechanisms







# Organic Reaction Key Terms

Nucleophile

\_\_\_\_\_  
( )

Electrophile

\_\_\_\_\_  
( )

Addition

\_\_\_\_\_

Substitution

\_\_\_\_\_

Elimination

\_\_\_\_\_

Oxidation

\_\_\_\_\_

Reduction

\_\_\_\_\_

Hydrolysis

\_\_\_\_\_

Polymerisation

\_\_\_\_\_

Mechanism



# Types of Isomerism

## Structural Isomers

Chain Isomers

Positional Isomers

Functional Group Isomers

Stereoisomers

Geometrical (E/Z) Isomers