

Organic Chemistry

Text	Unit Objectives:
22.1	1. Know the bonding type, conductivity, relative boiling points, reactivity, and reaction rates for organic compounds.
22.1	2. Be able to identify and distinguish between different homologous series alkanes, alkenes, alkynes, and aromatic hydrocarbons. Know how to distinguish between saturated and unsaturated hydrocarbons by looking at their molecular formula, structural formula, or general formula.
22.1	3. Know the name, molecular formula, structural formula, general formula and properties for alkanes with 1 to 10 carbons.
22.3	4. Know what an isomer is. Be able to draw structural formulas and name the isomers of butane and pentane. Know the trend between size of the molecule and the number of isomers it will have.
22.1	5. Learn the IUPAC naming system for naming organic compounds.
22.5	6. Know the source of hydrocarbons, and the process of fractional distillation, and cracking which is used in producing useful fuels.
22.2	7. Know the IUPAC names, molecular formulas, general formulas, structural formulas and properties for both alkenes and alkynes with 2 to 10 carbons.
22.4	8. Know the IUPAC names, molecular formulas, general formulas, structural formulas and properties for benzene series. Focus your attention on benzene and toluene.
23.2	9. Know what makes an organic compound an alcohol. Be able to name the first 5 primary alcohols and write structural formulas. Also be able to write structural formulas and name dihydroxy alcohols and trihydroxy alcohols. Focus attention on ethylene glycol and glycerol.
23.3	10. Know the structural formula, molecular formula and properties for organic acids. Focus attention on methanoic acid and ethanoic acid.
23.1, 23.2 23.3	11. Know the structural formula, molecular formulas of aldehydes, ketones, ethers, esters and haloalkanes.
23.1, 23.2 23.4	12. Important Organic Reactions a) addition b) substitution c) polymerization d) esterification e) fermentation f) saponification g) combustion

Essential Vocabulary

Addition Polymerization, Alcohol, Aldehyde, Alkane Series, Alkene Series, Alkyne Series, Amides, Amines, Amino Acid, Carboxylic Acid, Condensation Polymerization, Cracking, Dehydrating Agent, Ester, Esterification, Ether, Ethyne, Fermentation, Fractional Distillation, Functional Group, Hydrocarbon, Hydrogenation, Isomers, Ketones, Monomer, Organic Acid, Polymer, Polymerization, Primary Alcohol, Saturated Hydrocarbon, Saponification, Substitution Reaction, Unsaturated Hydrocarbon

Announcements:

1.