

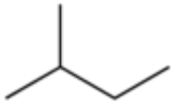
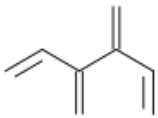
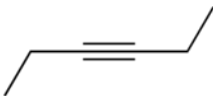

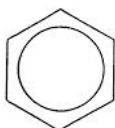
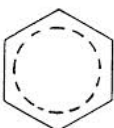
Monatomic Cations

antimony(V)	antimonic	copper(I)	cuprous
antimony(III)	antimonous	iron(III)	ferric
arsenic(V)	arsenic	iron(II)	ferrous
arsenic(III)	arsenous	manganese(III)	manganic
gold(III)	auric	manganese(II)	manganous
gold(I)	aurous	mercury(II)	mercuric
bismuth(V)	bismuthic	mercury(I)	mercurous
bismuth(III)	bismuthous	nickel(III)	nickelic
cerium(IV)	ceric	nickel(II)	nickelous
cerium(III)	cerous	lead(IV)	plumbic
chromium(III)	chromic	lead(II)	plumbous
chromium(II)	chromous	tin(IV)	stannic
cobalt(III)	cobaltic	tin(II)	stannous
cobalt(II)	cobaltous	titanium(IV)	titanic
copper(II)	cupric	titanium(III)	titanous

Organic Prefixes

# carbons	prefix	# carbons	prefix	# carbons	prefix
1	meth-	6	hex-	11	undec-
2	eth-	7	hept-	12	dodec-
3	prop-	8	oct-	13	tridec-
4	but-	9	non-	14	tetradec-
5	pent-	10	dec-	15	pentadec-

Types of Carbon Chains

Alkane	Alkene	Alkyne	Aromatic		
C-C single bonds only	Contains at least one C=C double bond	Contains at least one C≡C triple bond	Benzene – may be substituted		
					

Organic Functional Groups

Class of Compound	Functional Group	Suffix	Diagram		
Alcohol	Hydroxyl	-ol	$\begin{array}{c} \text{OH} \\ \\ \text{H}-\text{C}-\text{H} \\ \\ \text{R} \end{array}$	$\begin{array}{c} \text{OH} \\ \\ \text{R}-\text{C}-\text{H} \\ \\ \text{R}' \end{array}$	$\begin{array}{c} \text{OH} \\ \\ \text{R}-\text{C}-\text{R}'' \\ \\ \text{R}' \end{array}$
			Primary (1°)	Secondary (2°)	Tertiary (3°)
Aldehyde	Formyl	-al	$\begin{array}{c} \text{O} \\ \\ \text{R}-\text{C}-\text{H} \end{array}$		
Amine		-amine	$\begin{array}{c} \ddot{\text{N}} \\ / \quad \backslash \\ \text{R}^1 \quad \text{H} \\ \quad \quad \\ \quad \quad \text{H} \end{array}$	$\begin{array}{c} \ddot{\text{N}} \\ / \quad \backslash \\ \text{R}^1 \quad \text{H} \\ \quad \quad \\ \quad \quad \text{R}^2 \end{array}$	$\begin{array}{c} \ddot{\text{N}} \\ / \quad \backslash \\ \text{R}^1 \quad \text{R}^3 \\ \quad \quad \\ \quad \quad \text{R}^2 \end{array}$
			Primary (1°)	Secondary (2°)	Tertiary (3°)
Carboxylic Acid	Carboxyl	-oic acid	$\begin{array}{c} \text{O} \\ \\ \text{R}-\text{C}-\text{OH} \end{array}$		
Ester		-oate	$\begin{array}{c} \text{O} \\ \\ \text{R}-\text{C}-\text{OR}' \end{array}$		
Ether		[...] ether	$\text{R}-\text{O}-\text{R}'$		
Ketone	Carbonyl	-one	$\begin{array}{c} \text{O} \\ \\ \text{R}-\text{C}-\text{R}' \end{array}$		