
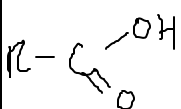
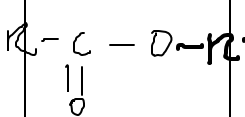
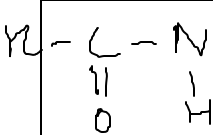
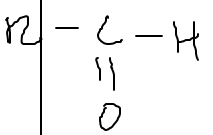
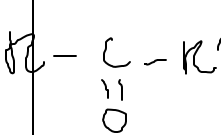
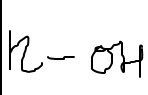
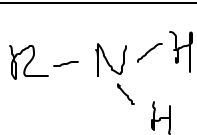
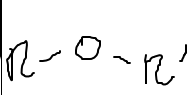
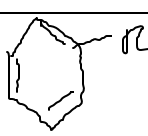
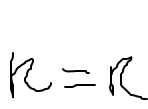

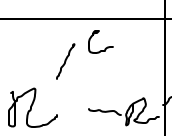
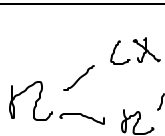


SCH4U1	Putting It All Together
Organic Chemistry	

Priority of functional groups

Priority	Functional Group	Condensed Functional Group	Name of Functional Group	Name of Compound	Suffix or Prefix	Name as a Side Group
Highest 		-COOH	Carboxyl group	Carboxylic Acid	-oic acid	Carboxy-
		-C(O)OC-	Ester linkage	Ester	-oate	Alkoxycarbonyl-
		-CONH ₂	Amide group	Amide	-amide	Amido-
		-COH	Formyl group	Aldehyde	-al	Formyl-
		-CO-	Carbonyl group	Ketone	-one	Oxo-
		-OH	Hydroxyl group	Alcohol	-ol	Hydroxy-
		-NH ₂	Amino group	Amine	-amine	Amino-
		-COC-	Alkoxy group	Ether	-oxy	Alkoxy-
		-Ph	N/A	Benzene	N/A	Phenyl-
		-C=C-	N/A	Alkene	-ene	Alkenyl
		-C≡C-	N/A	Alkyne	-yne	Alkynyl-
		-C-C-	Alkyl group	Alkane	-ane	Alkyl-
Lowest		-CX	N/A	Haloalkane	Fluoro- Chloro- Bromo- Iodo-	Fluoro- Chloro- Bromo- Iodo-

Compounds with more than one functional group

Naming

1. Identify highest priority functional group.

a. Identify all functional groups.

2. Identify & number longest chain containing highest priority functional group.

a. If 2 chains of same length, choose the chain with the most functional groups.

3. Identify & assign numbers to side groups.

4. Assemble parts of the name of the compound.

a. Make sure side groups are listed in alphabetical order

Drawing

1. Identify & draw highest priority group.

2. Identify, draw & number parent chain.

3. Identify & draw side groups.

4. Add hydrogen atoms to give each carbon atom a total of 4 bonds.

Benzene derivatives with functional groups

IUPAC Name	Benzenol	Benzenamine	Benzenecarboxylic acid
Structure			

Try these!

Naming:

Drawing;