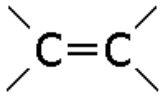
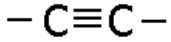
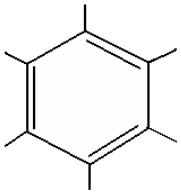
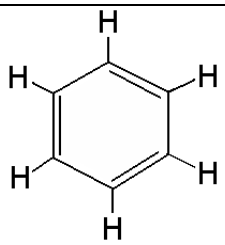
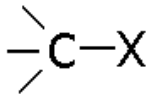
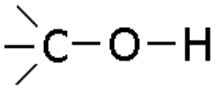
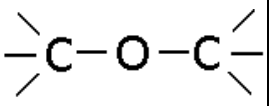
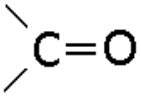
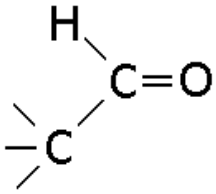
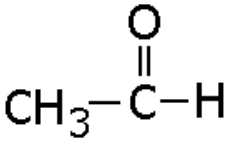
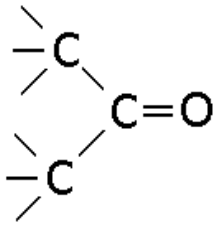
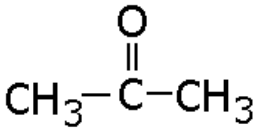
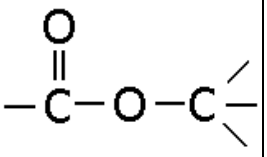
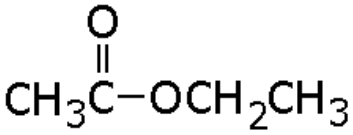
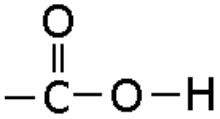
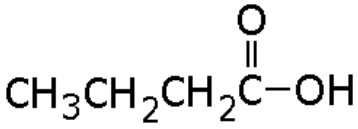
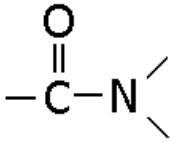
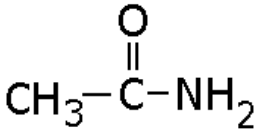
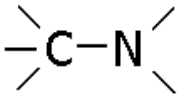
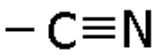
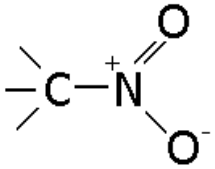
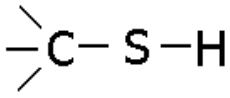
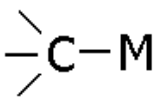
FUNCTIONAL GROUPS and Their Names

Compound type	Functional group	Simple Example	Name ending
Alkene (double bond)		**CH_3CHCH_2** Propene	*-ene*
Alkyne (triple bond)		**CH_3CCH** Propyne	*-yne*
Arene (aromatic)		 Benzene	None
Halide	 X = F. Cl, Br, I	**CH_3CH_2I** Iodoethane or Ethyl Iodide	None
Alcohol		**CH_3CH_2OH** Ethanol	*-ol*
Ether		**$CH_3CH_2O\ CH_2CH_3$** Ethoxyethane or Diethyl ether	*ether* *if the two carbon groups on the oxygen are different groups then: name the shorter side with *–oxy* ending + larger side *if same then: di(group name)+ ether
Carbonyl Bond		This is not a functional group. It is the name of a <u>type</u> of a bond found in many functional groups.	
Aldehyde		 Ethanal	*-al*

Ketone		 2 – Propanone	*-one*
Ester		 Ethyl Ethanoate	*-oate*
Carboxylic acid		 Butanoic acid	*-oic acid*
Amide		 Ethanamide	*-amide*
Amine		**$CH_3CH_2NH_2$** Ethylamine	*-amine*
Nitrile		**CH_3CN** Ethanenitrile	*-nitrile*
Nitro		**$CH_3CH_2NO_2$** Nitroethane	Use nitro as a prefix
Thiols		**$CH_3 – SH$** methyl thiol	*Thiol*
Organometallic	 M = Metal	**$CH_3 – Li$** Methyl lithium	None