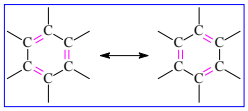
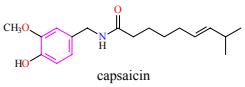
Aromatic Compounds

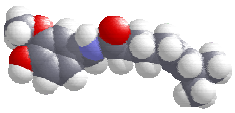
Essential feature: benzene-like rings



An example:

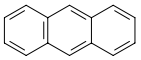


capsaicin

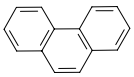


Polycyclic Aromatic Compounds

naphthalene

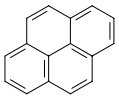


anthracene

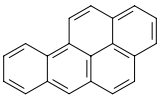


phenanthrene

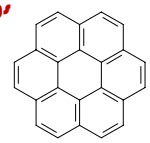
note the benzene-like rings



pyrene

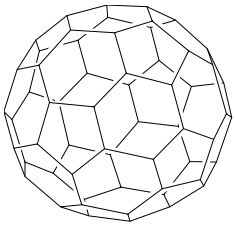


benzo[a]pyrene



coronene

Polycyclic Aromatic Compounds



C_{60} or "buckminsterfullerene"

Heterocyclic Aromatic Compounds

Essential feature: rings with three conjugated electron pairs

pyridine

pyrimidine

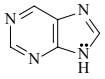
pyrrole

imidazole

furan

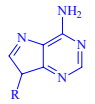
thiophene

indole



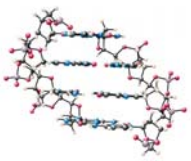
purine

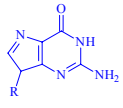
Heterocyclic Aromatic Compounds



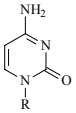
adenine

purines





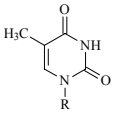
guanine



cytosine

DNA bases

pyrimidines



thymine

Nomenclature: Root names

toluene

styrene

phenol

anisole

aniline

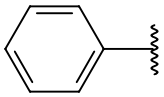
benzoic acid

benzaldehyde

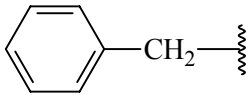
benzonitrile

Memorize!

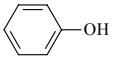
Nomenclature: Substituent names



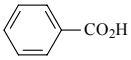
phenyl



benzyl

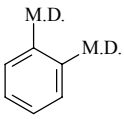


phenol

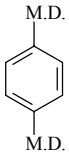


benzoic acid

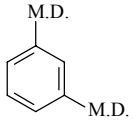
Nomenclature: Di-substitution rebus



ortho-docs

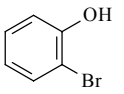


para-docs



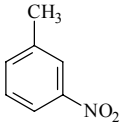
meta-physicians

Nomenclature: Di-substitution



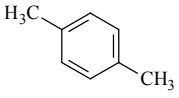
ortho-bromophenol

2-bromophenol



meta-nitrotoluene

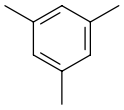
3-nitrotoluene



para-xylene

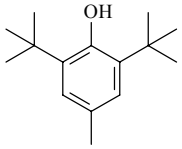
1,4-dimethylbenzene

Nomenclature: multiple substitution



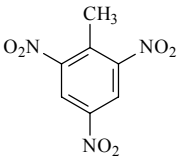
1,3,5-trimethylbenzene

"mesitylene"



2,6-di-*t*-butyl-4-methylphenol

"BHT"



2,4,6-trinitrotoluene

"TNT"