

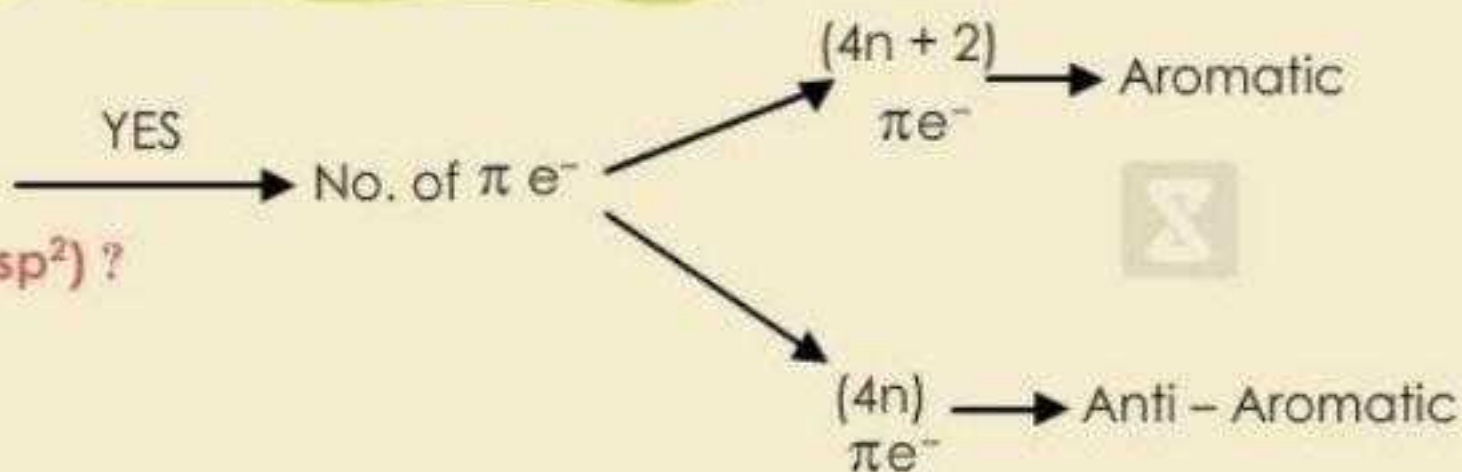
AROMATIC COMPOUNDS

DETERMINING AROMATICITY

Is the compound....

1. - Planar ?
2. - monocyclic ?
3. - fully conjugated (all carbon are sp^2) ?

No
not aromatic



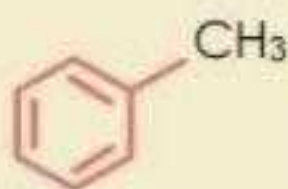
Hückel's Rule : $(4n + 2) \pi e^-$

n	0	1	2	3	4
$4n + 2$	2	6	10	14	18

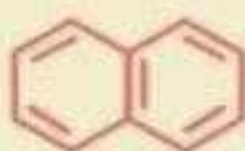
COMMON NAMES OF AROMATIC COMPOUNDS



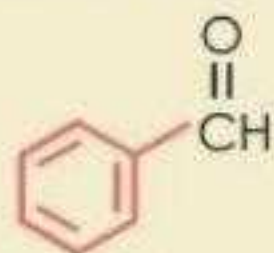
Benzene



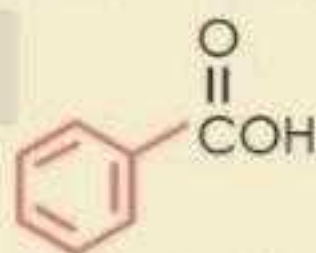
Toluene



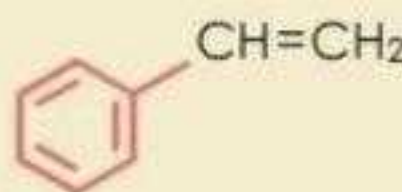
Naphthalene



Benzaldehyde

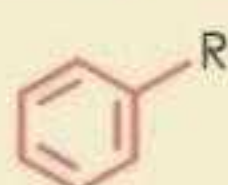


Benzoic Acid

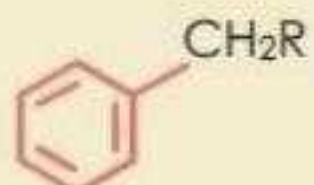


Styrene

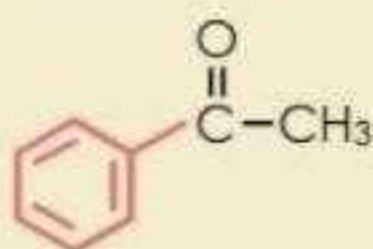
Groups



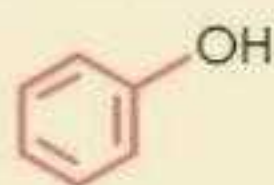
Phenyl group



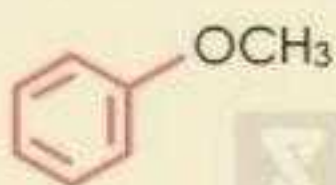
Benzyl group



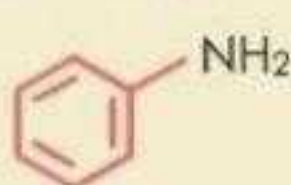
Acetophenone



Phenol



Anisole



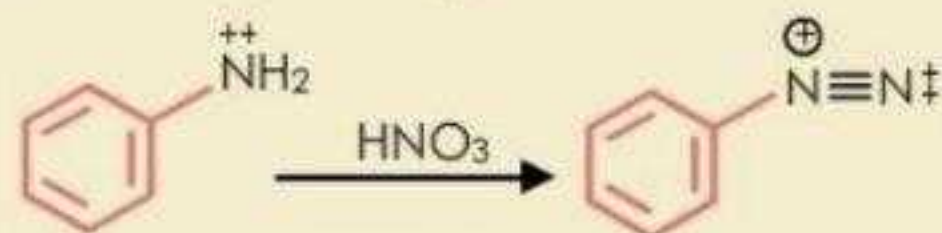
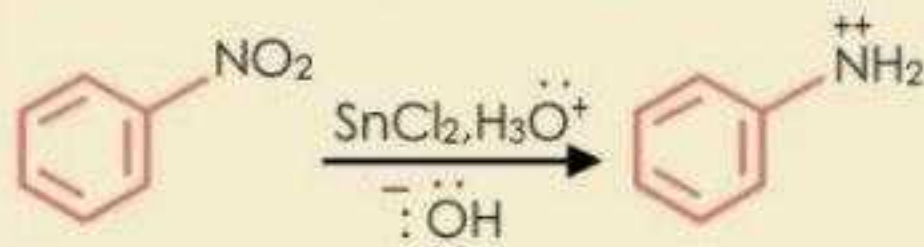
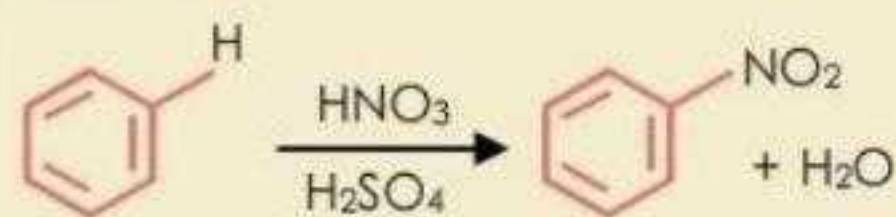
Aniline

REACTIONS OF AROMATIC MOLECULES

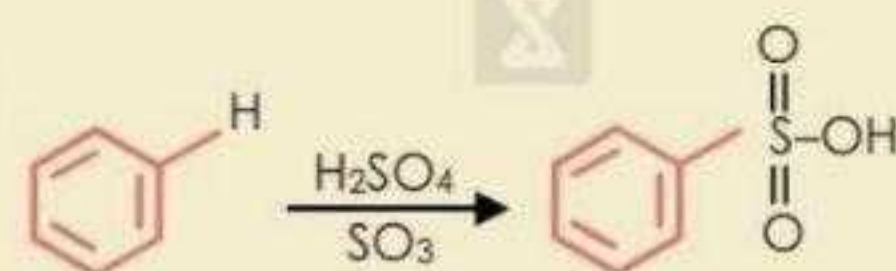
Addition Reaction



Nitration



Sulfonation



Friedel Craft

