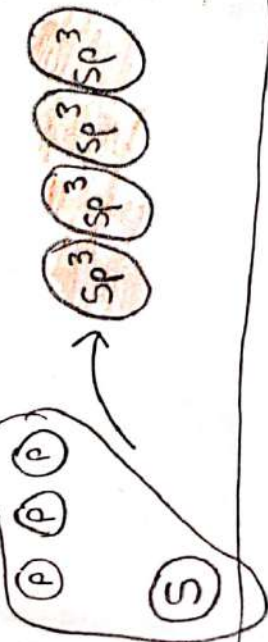


4 e⁻ regions



we get: 4 equal energy
Sp³ orbitals



molecular geometry:

0 LP = tetrahedral

1 LP = trigonal pyramidal

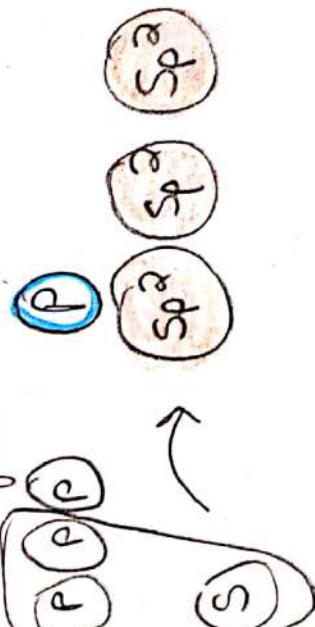
2 LP = Bent

bond angles

109.5°

* all single
bonds and/or
L.P.

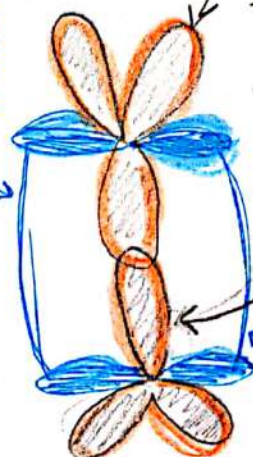
3 e⁻ regions



we get: 3 equal energy Sp²
orbitals, 1 unhybridized p
orbital

ex CH₂=CH₂

1/2 π bonds



molecular geometry

0 LP = trigonal planar

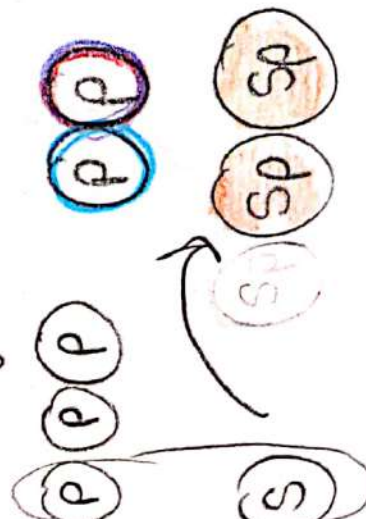
1 LP = Bent

Bond angles

120°

* double
bond

2 e⁻ regions



we get: 2 hybridized (equal energy)
Sp orbitals, 2 unhybridized p orb.

ex CH≡CH

σ bonds

p orbital



molecular geometry

linear

bond angles

180°

* Triple bond