

Ch 8 HW: Sec Asses 25,26 Rev Con 56,67,85,100
 Sec 8.3B

obj: Describe orbital hybridization.

Valence Bonding Theory

- Also known as orbital Hybridization
- Provides Both the type of molecular bonding and the shape of the molecule.
- When two orbitals overlap they produce a hybrid orbital.

sp

1 s orbital
w/ 1 p orbital

sp²

1 s orbital
w/ 2 p orbitals

sp³

1 s-orbital
w/ 3 p orbital

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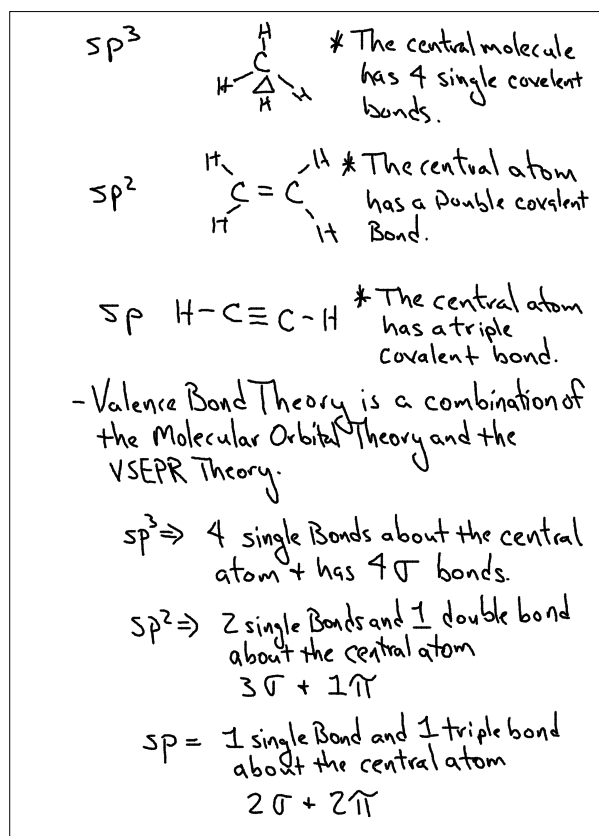
- The Valence Bonding Theory can be used to predict shapes of molecules.

sp \Rightarrow Linear molecule
2 pairs of Bonding electrons

sp² \Rightarrow trigonal planar molecule
3 pairs of Bonding electrons

sp³ \Rightarrow tetrahedral molecule
4 pairs of Bonding electrons

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Apr 1 - 8:48 AM

Feb 12-2:10 PM