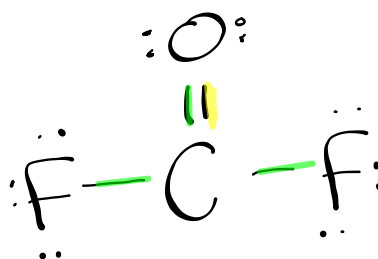
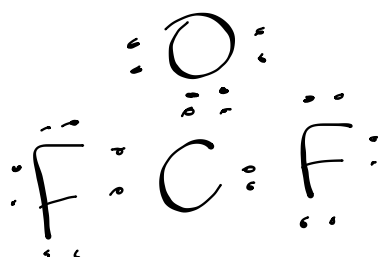
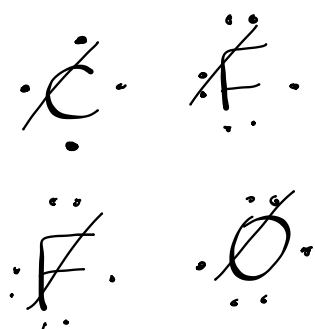
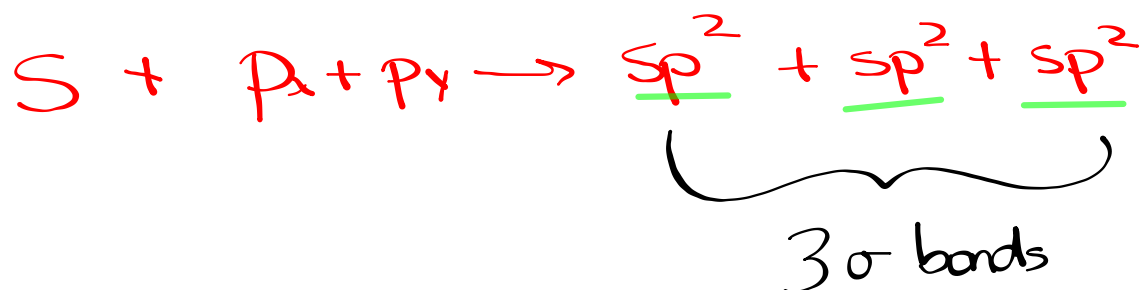


Warm Up

Determine the type of hybrid orbitals used by the carbon atom in CF_2O .



C bonds to 3 atoms



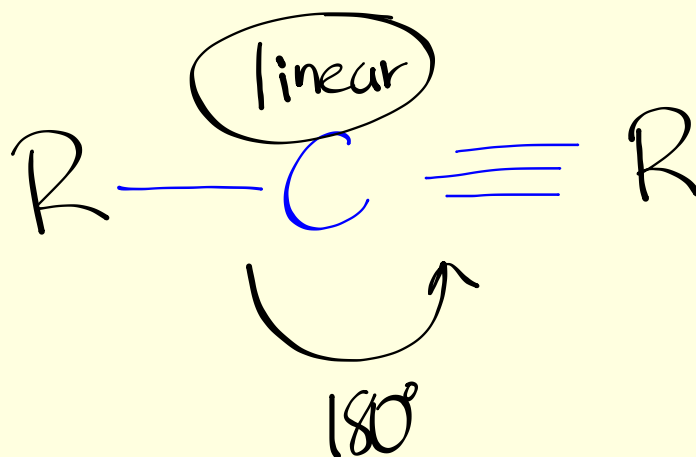
p. 236 #23-29

linear
trigonal planar
tetrahedral

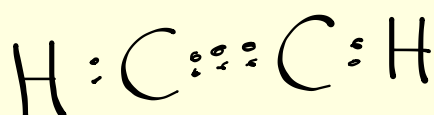
26. c) SP

↳ s + p_x

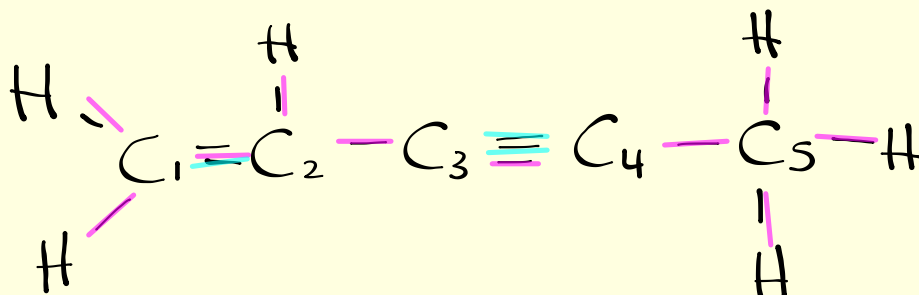
↳ C bonds to 2 atoms

②⑧ C₂H₂

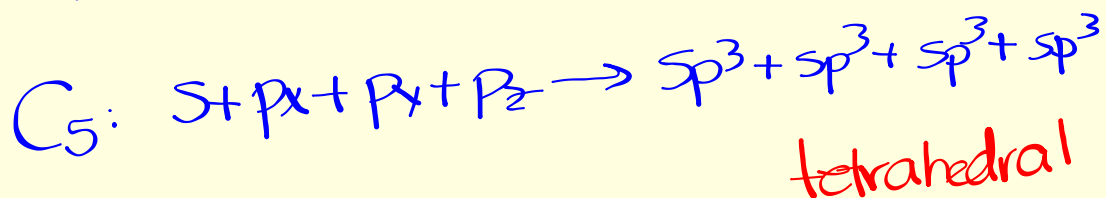
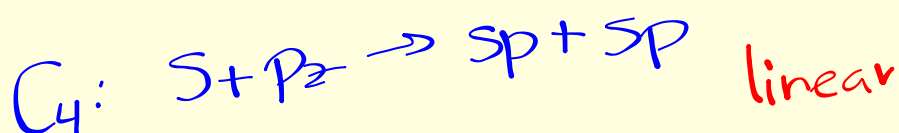
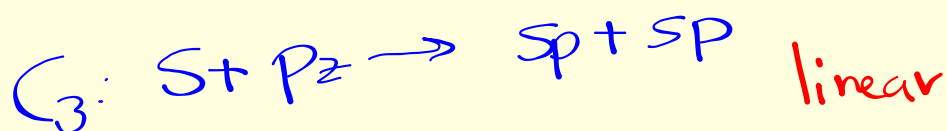
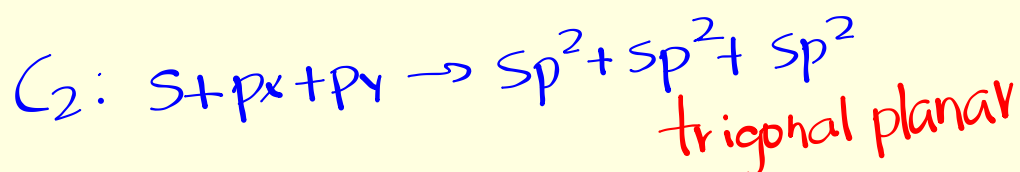
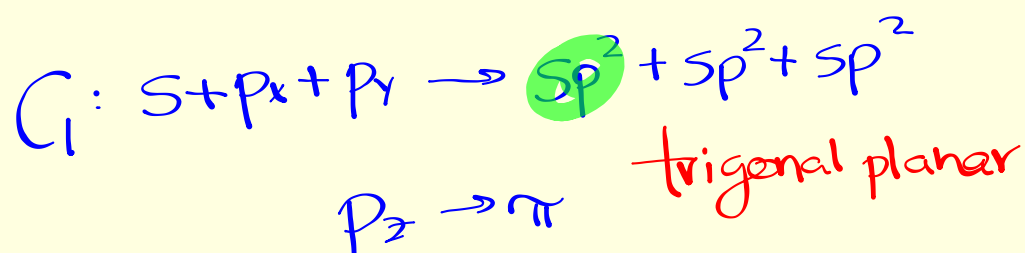
3σ, 2π



Determine the type of hybrid orbitals used by each carbon atom. State the total number of sigma and pi bonds.



$$\frac{10}{3} \begin{matrix} \sigma \\ \pi \end{matrix}$$



Worksheet 8.3

Single bonds $4sp^3 (s + p_x + p_y + p_z)$

- sigma bonds

tetrahedral, pyramidal, bent

Double bonds $3sp^2 (s + p_x + p_y)$

- 3 sigma bonds

 p_z

- pi bond

trigonal planar

Triple bonds $2sp (s + p_x)$

- 2 sigma bonds

 p_y, p_z

- 2 pi bonds

linear