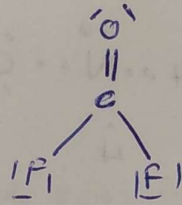
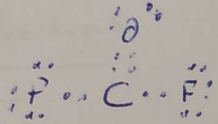
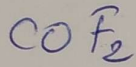


struktur kimia

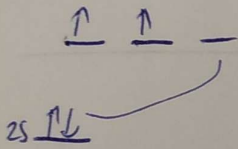
1

1

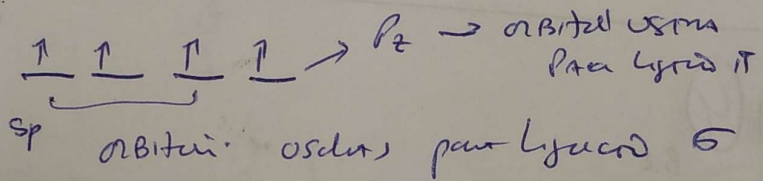


Trigonal Planar

sp^2

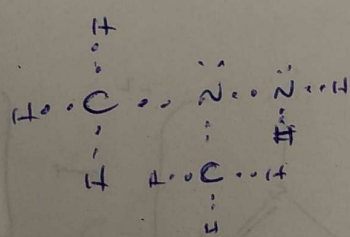


orbital hybrid

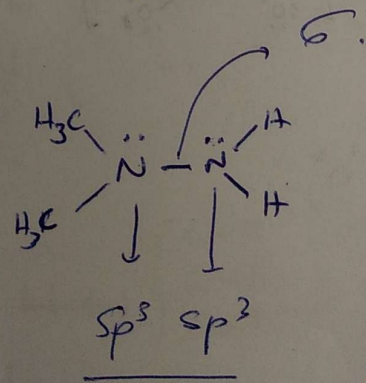


2

- $5 \times 2 = 10$
- 4
- 1×3
- 4
- 1×3
- 1×2

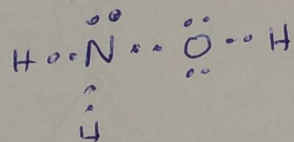


26 B pairs

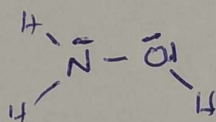


3

H₂NOH

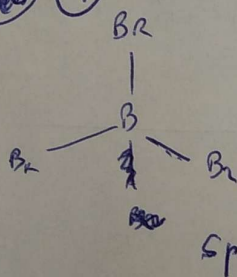


$$\begin{array}{r}
 1 \times 3 \\
 5 \\
 6 \\
 1 \\
 \hline
 14 \rightarrow 7 \text{ pairs}
 \end{array}$$



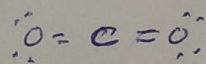
sp³ (N and O)

4



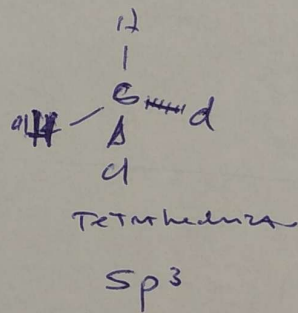
Trigonal Planar

sp²



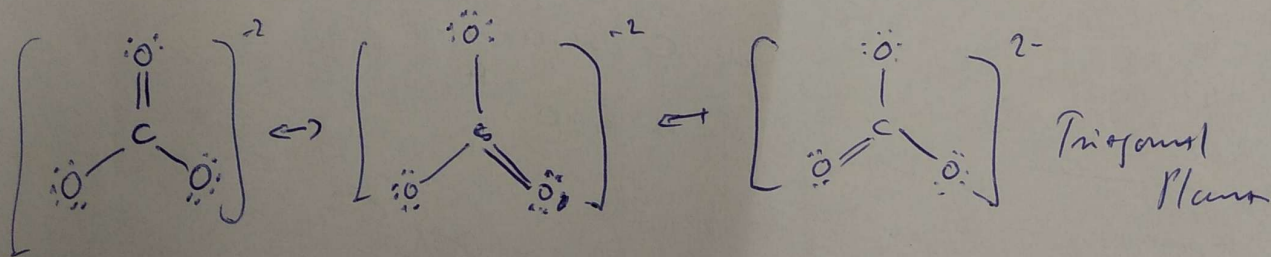
Linear

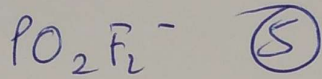
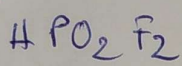
sp



Tetrahedral

sp³





1
2x6
2x7
5
32 (46 mo)

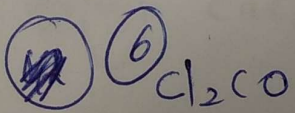
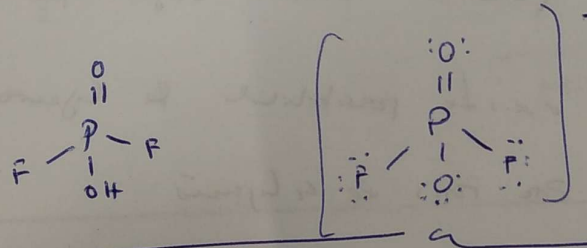
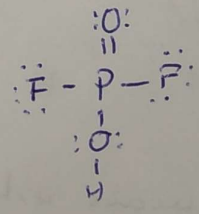
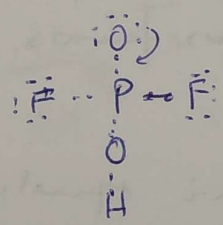
Hybridization

3d - - - -
3p 1 1 1
3s 1 1

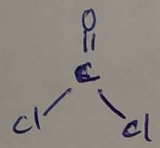
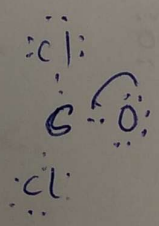
orbital hybrid

1 1 1 1 1
sp³d

Lewis



7x2
4
6
29
12



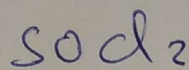
Trigonal Planar

sp² → C

3 hybrid σ (orbitals hybrid) } C-O
C-Cl
C-Cl
1 hybrid π (orbital p_z) }
C-O empty

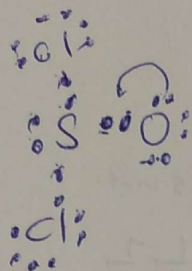
2p 1 1 1
2s 1 1
1 1 1 1
sp p_z

7



6	
6	13 pares
14	
26	

8
H₂⁺



o oxoigênio está no 3^o = 3
logo pode ter mais 7
e ele não tem seu selo

↓
temos que verificar os
cargas formais.

$O = 6 - (6 + \frac{1}{2} \times 2) = 0$

$S = 6 - (6 + \frac{1}{2} \times 2) = -1$

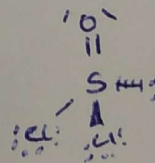
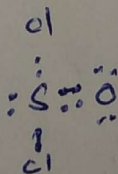
$Cl = 6 - (2 + \frac{1}{2} \times 6) = +1$

A estrutura mais correta é a que
apresenta a menor carga formal

Vamos verificar se existe possibilidade de ligação dupla.

→ oxoigênio em 3^o de ligação

→



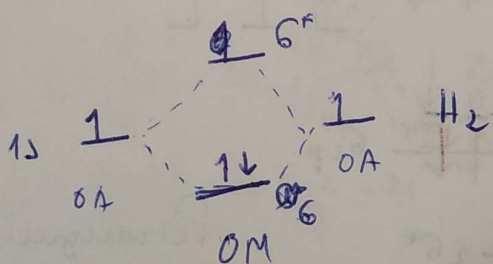
$O = 6 - (6 + \frac{1}{2} \times 2) = 0$

$S = 6 - (4 + \frac{1}{2} \times 4) = 0$

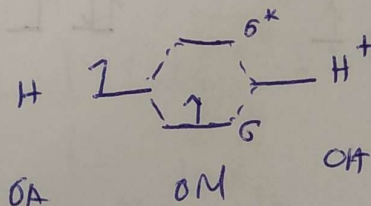
$Cl = 6 - (4 + \frac{1}{2} \times 4) = 0$

Como a carga formal é 0 para
é a melhor estrutura de
Lewis.

Sp³



$$OL = \frac{2}{2} = 1$$



$$OL = \frac{1}{2} = 0,5$$

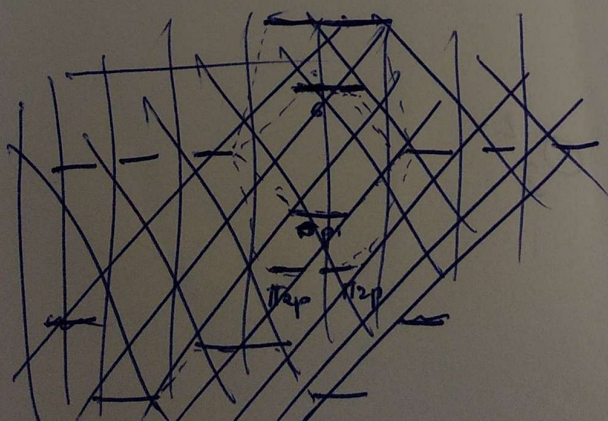
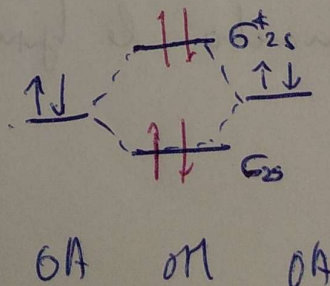
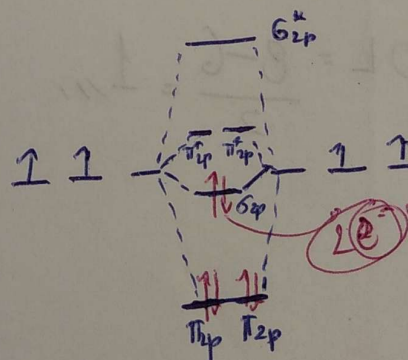
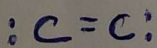
Mais fraco H_2

9

CaC_2 (carbeto de cálcio)

Acetileno C_2^{2-}

NÃO É PARAMAGNÉTICO



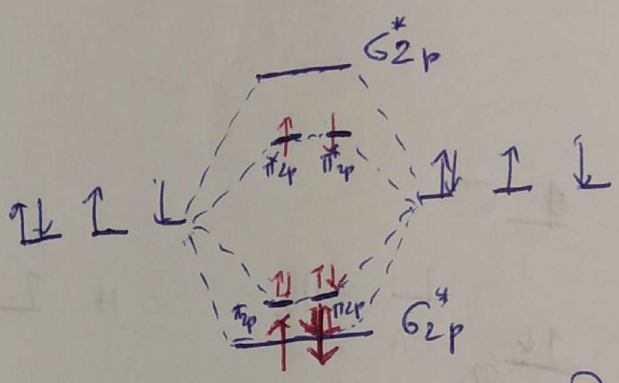
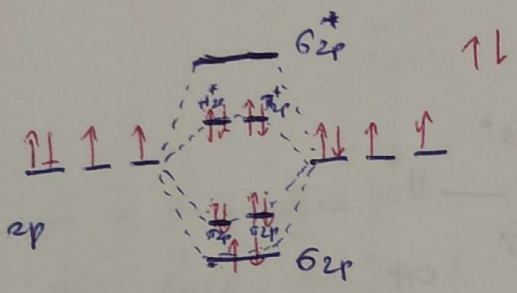
(40) (10)

Na_2O_2

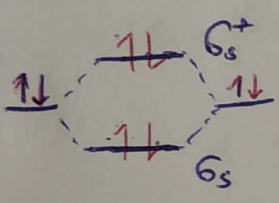
hijos π e σ existen en O_2^{2-}

O_2^{2-}

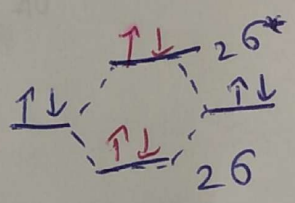
O_2



Paramagnético



Diamagnético



$$(\sigma_{2s})^2 (\sigma_{2s}^*)^2 (\sigma_{2p})^2 (\pi_{2p})^4 (\pi_{2p}^*)^4 - \text{O}_2^{2-}$$

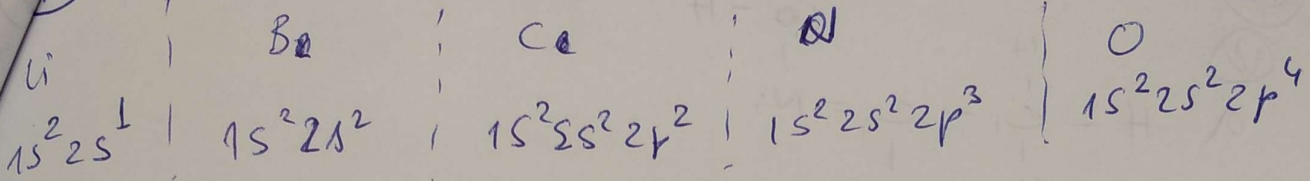
$$(\sigma_{2s})^2 (\sigma_{2s}^*)^2 (\sigma_{2p})^2 (\pi_{2p})^4 (\pi_{2p}^*)^2 - \text{O}_2$$

$$OL = \frac{8-6}{2} = 1$$

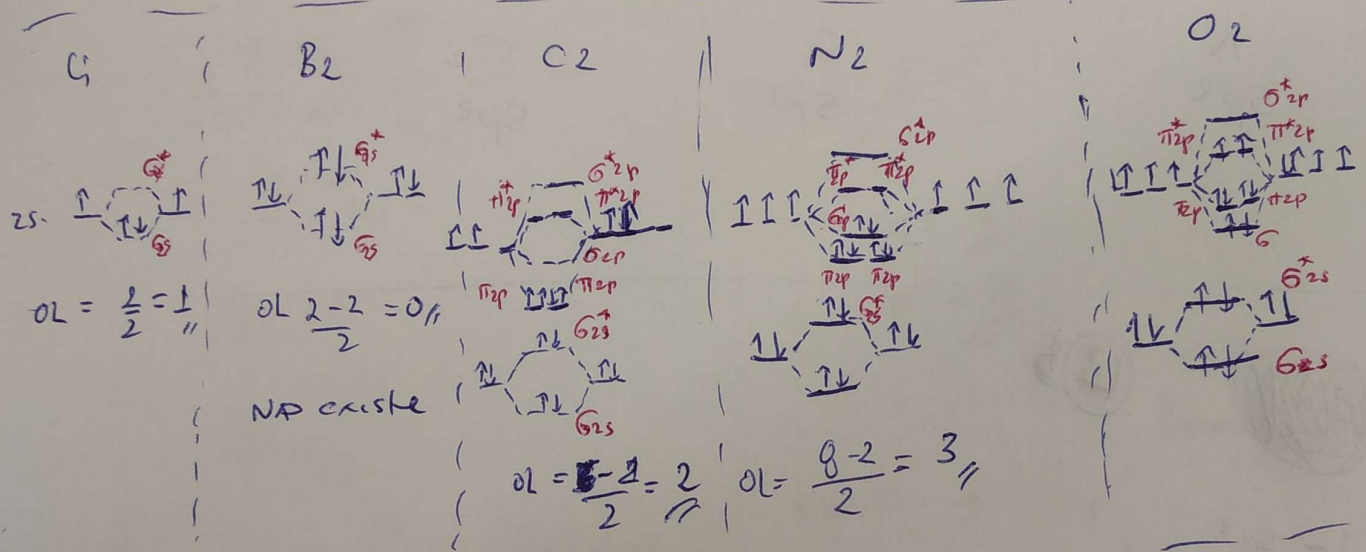
$$OL = \frac{8-4}{2} = 2$$

comprueba la fuerza de $\text{O}_2 < \text{O}_2^{2-}$

(11)



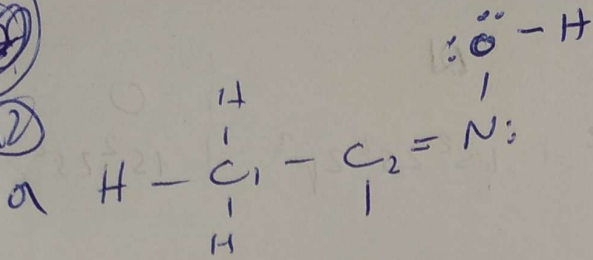
A liganza misis cuntu sera + am neur order de ligan



Li₂ ten a liganza misis liganza
N₂ ten a liganza misis

~~(12)~~

(12)



N
sp²

C₁
sp³

C₂
sp²

~~(12)~~

(12) b

- 1 - sp²
- 2 - sp³
- 3 - sp³
- 4 - sp³
- 5 - ~~sp³~~ sp³