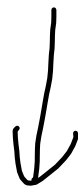


Lewis structures

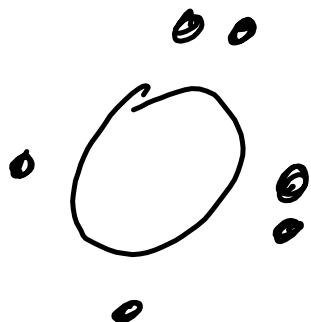
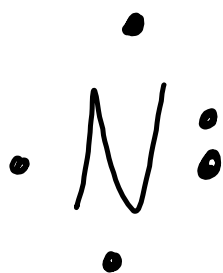
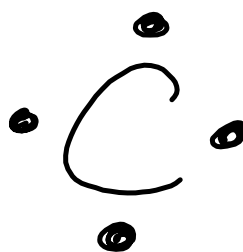
Group # \rightarrow # valence e^-



Lewis dot symbol

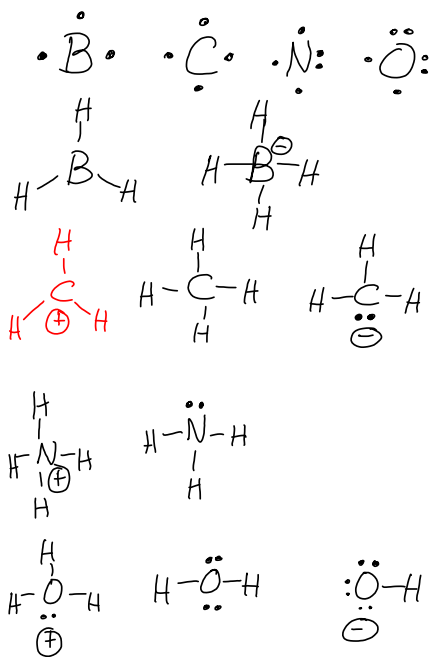


bonds + lps



Rules

- ① count up valence e⁻
(add up Group #'s)
- ② find least e⁻ neg atom
+ put it in center
(H must be peripheral)
- ③ put other atoms
around the central atom
- ④ make framework bonds
then add π bonds + lps
so as to have normal
bonding w/ neutral atoms
- ⑤ If normal bonding
is not possible then
an atom can bond like
it's immediate neighbors
+ will have a formal charge
(to left will be \oplus)
(to right will be \ominus)

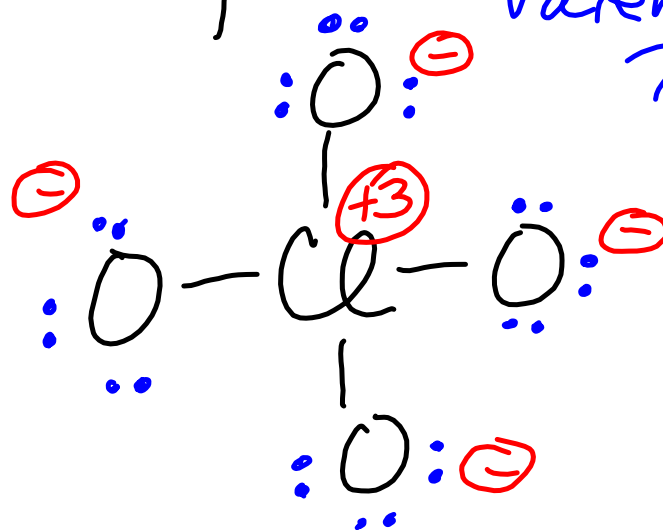


H + F make only

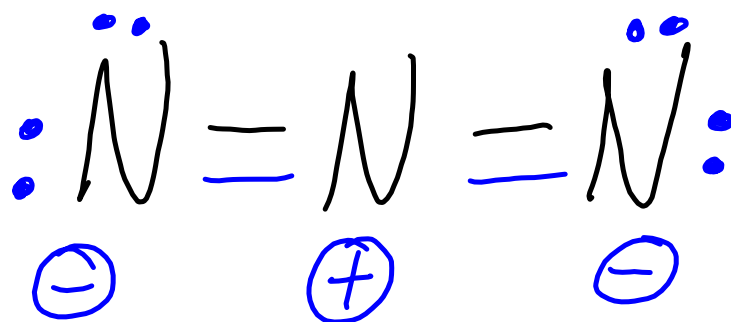
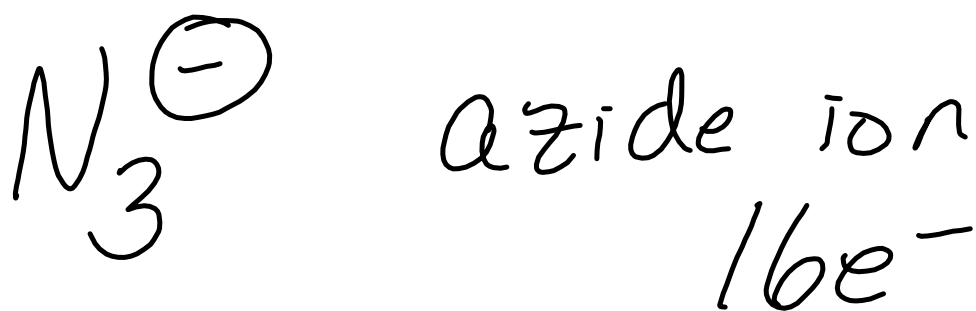
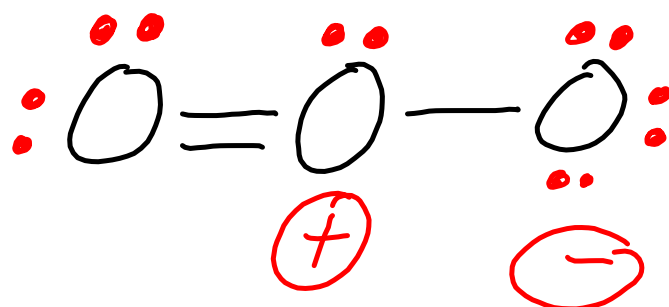
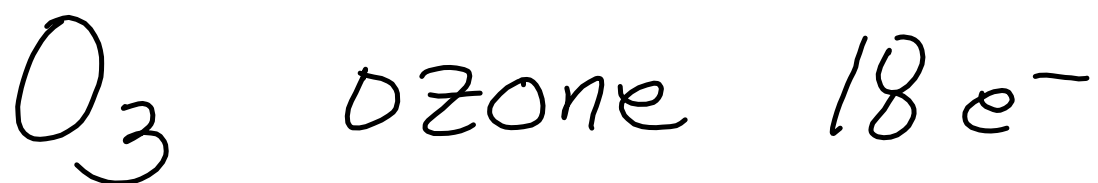
perchlorate ion

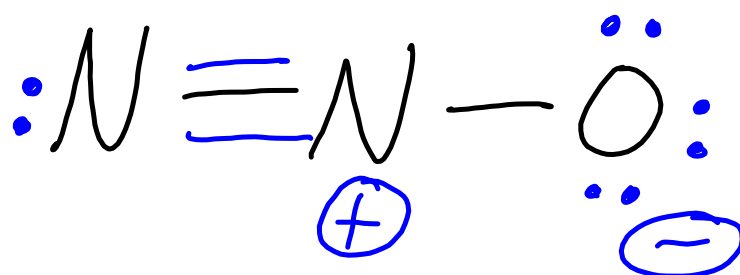
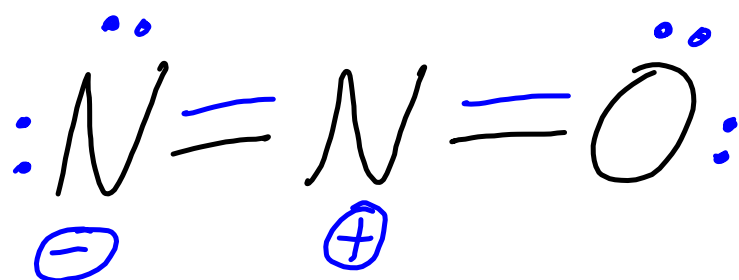
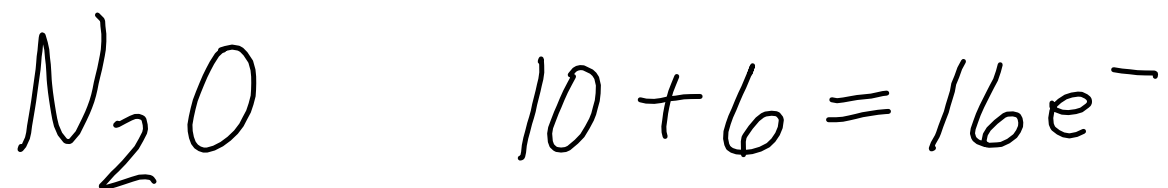


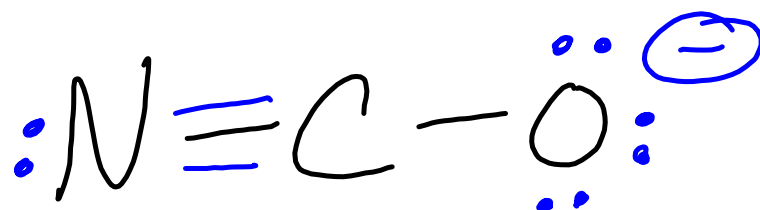
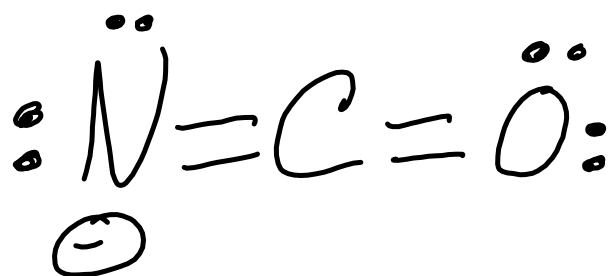
valence e^-
 $7 + 24 + 1 = 32$

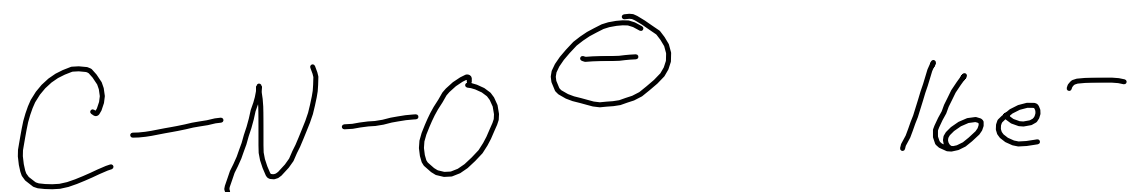


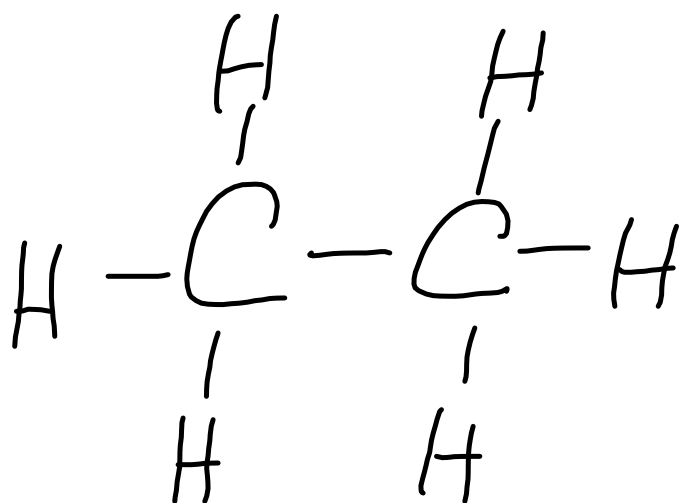
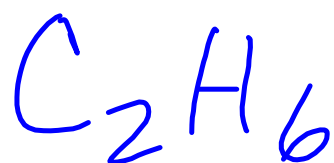
halides - single bonds only





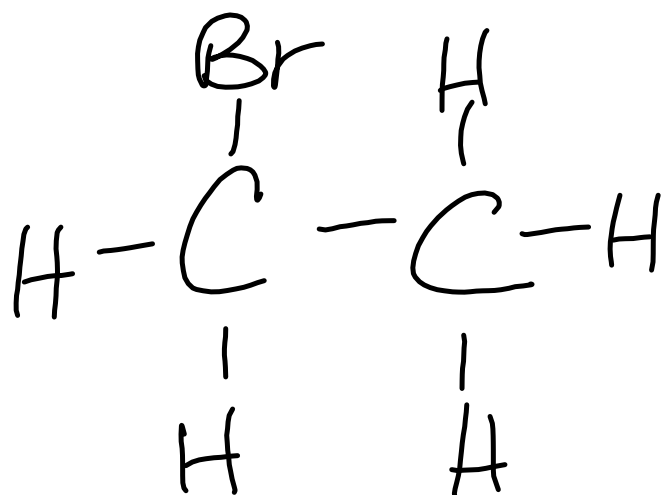




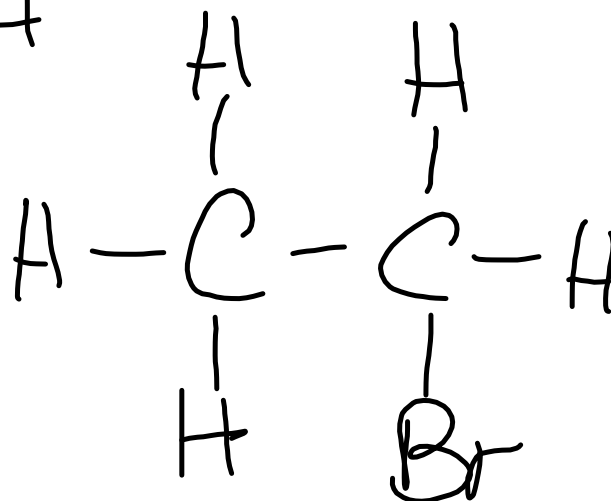


H's are
all equiv

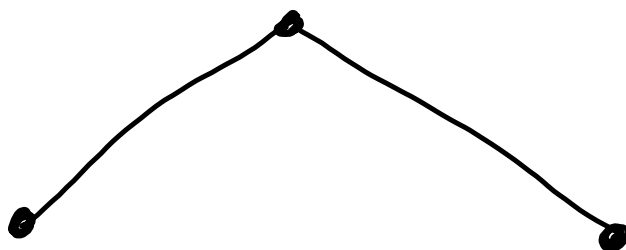
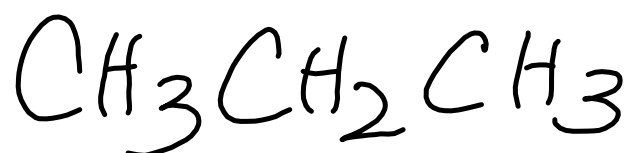
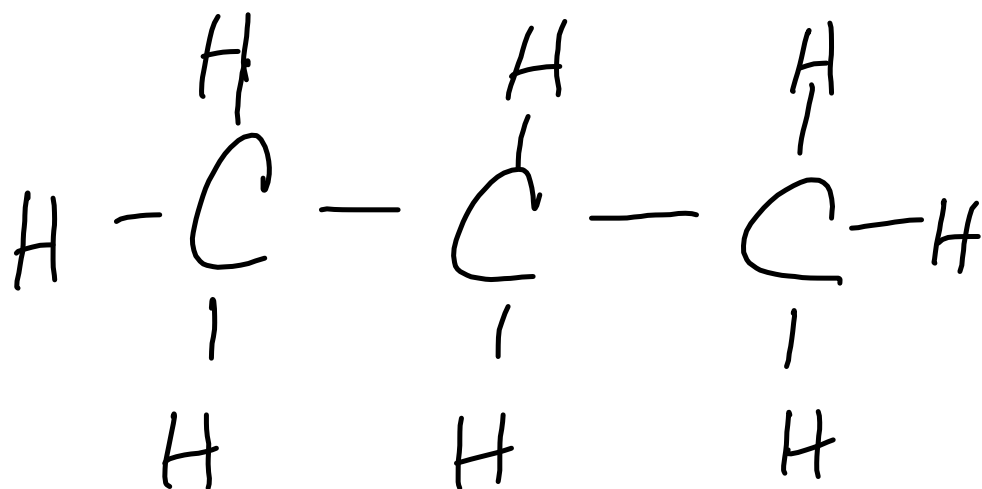
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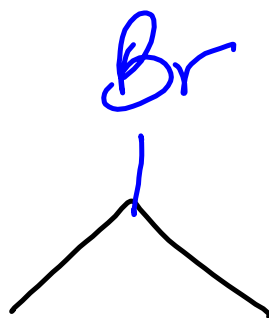
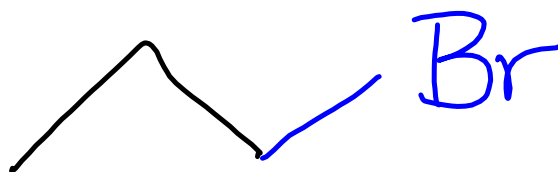
Lewis
Structure

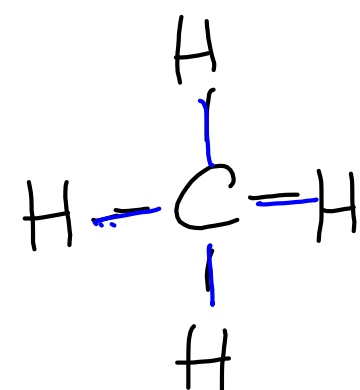


Condensed
Structure $\text{CH}_3\text{CH}_2\text{Br}$

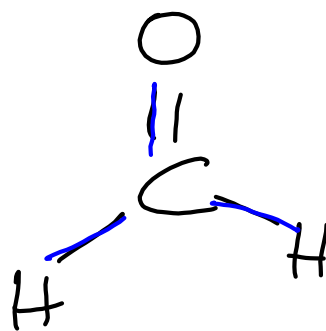


Each pt is a C

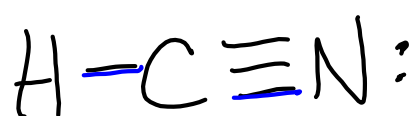




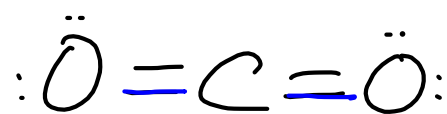
Steric # 4



Steric # 3



Steric # 2

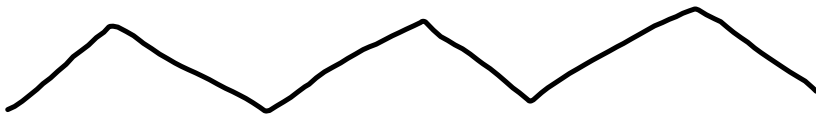


Steric # 2

4 = sp^3 = tetrahedral
109°

3 = sp^2 = trigonal planar
120°

2 = sp = linear



7 C's in row