

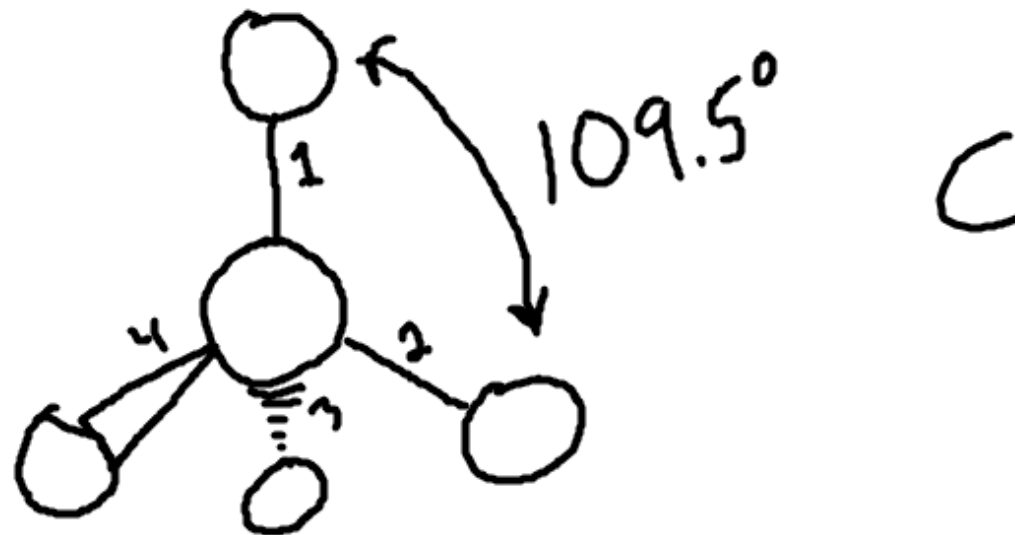
models 3.1 Shapes

Space filling - shows size of atoms

Ball + Stick - model kit

Tube model - looks like tubes

Tetrahedral - 4 pairs of  $e^-$ 's around it  
octet rule = yes



Trigonal pyramidal 4 prs of e<sup>-</sup>s

3-bonds

1-unshared pr



Bent

4 prs of  $e^-$ 's

2-bonds

2-unshared prs

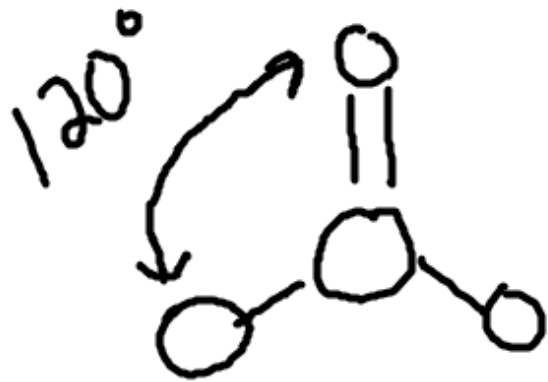
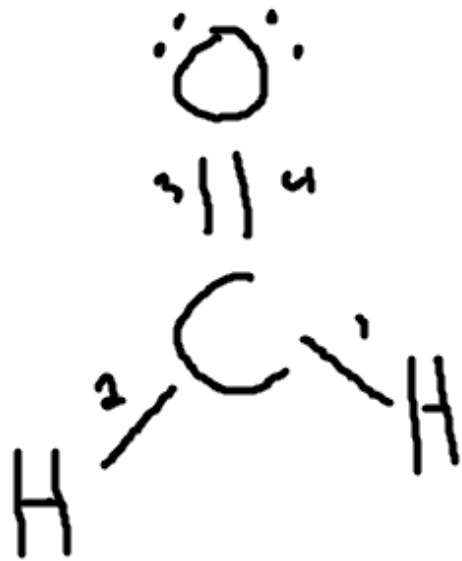


104.5°  
why?  
2 unshared  
prs.



Trigonal planar

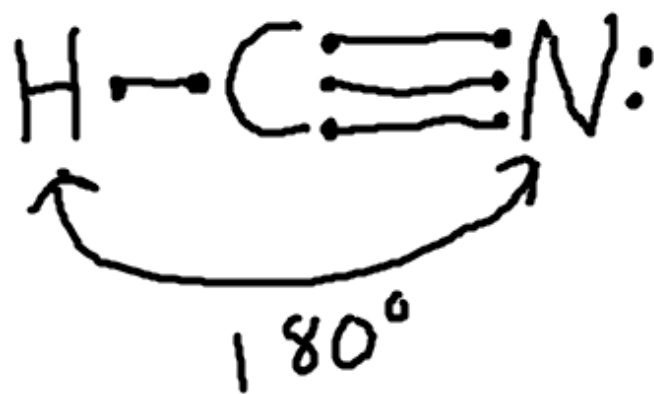
4 pvs or 3 pvs



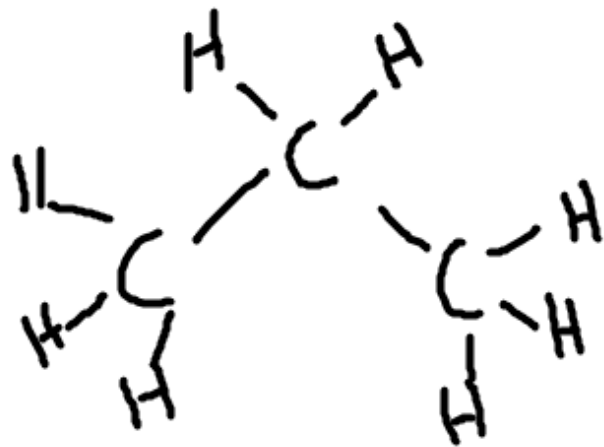
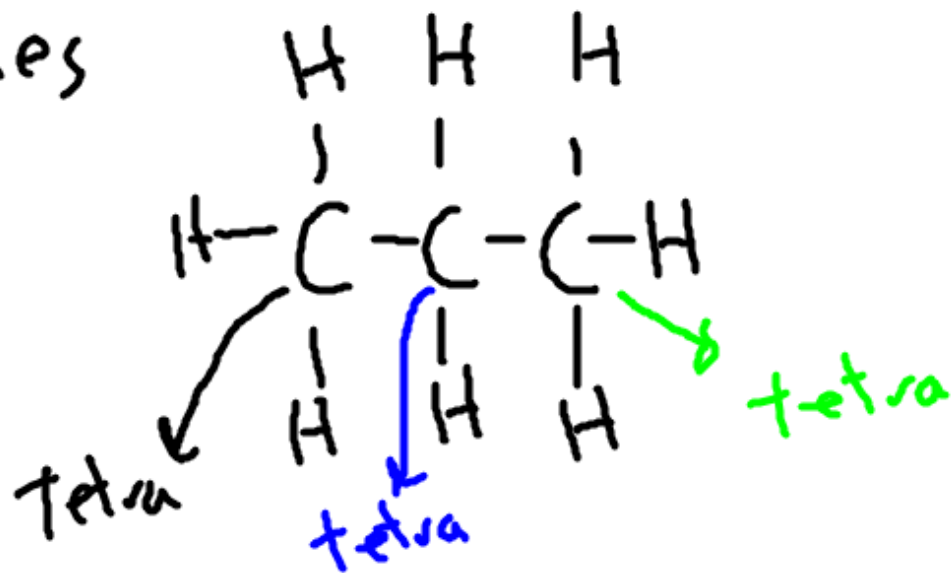
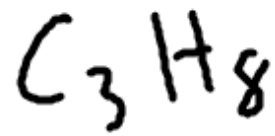
linear

4 p's e's

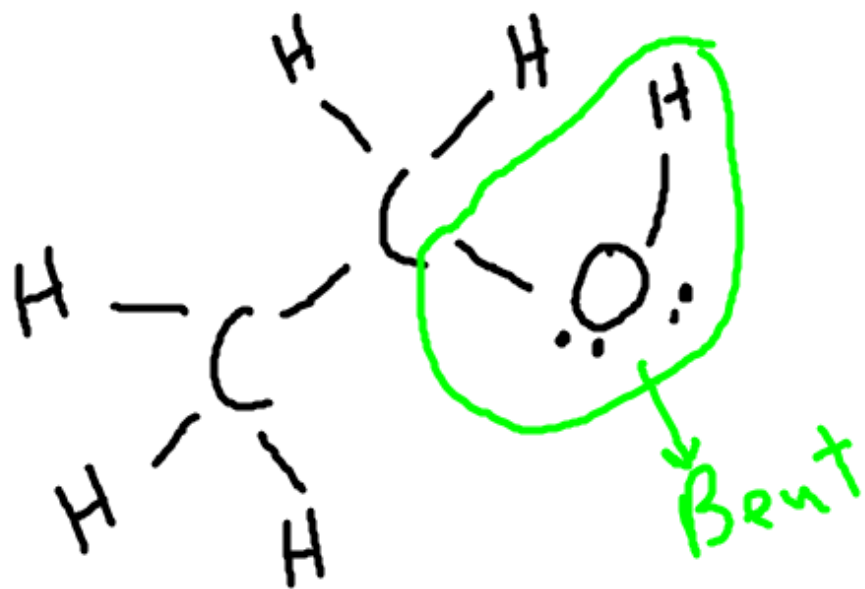
HCN



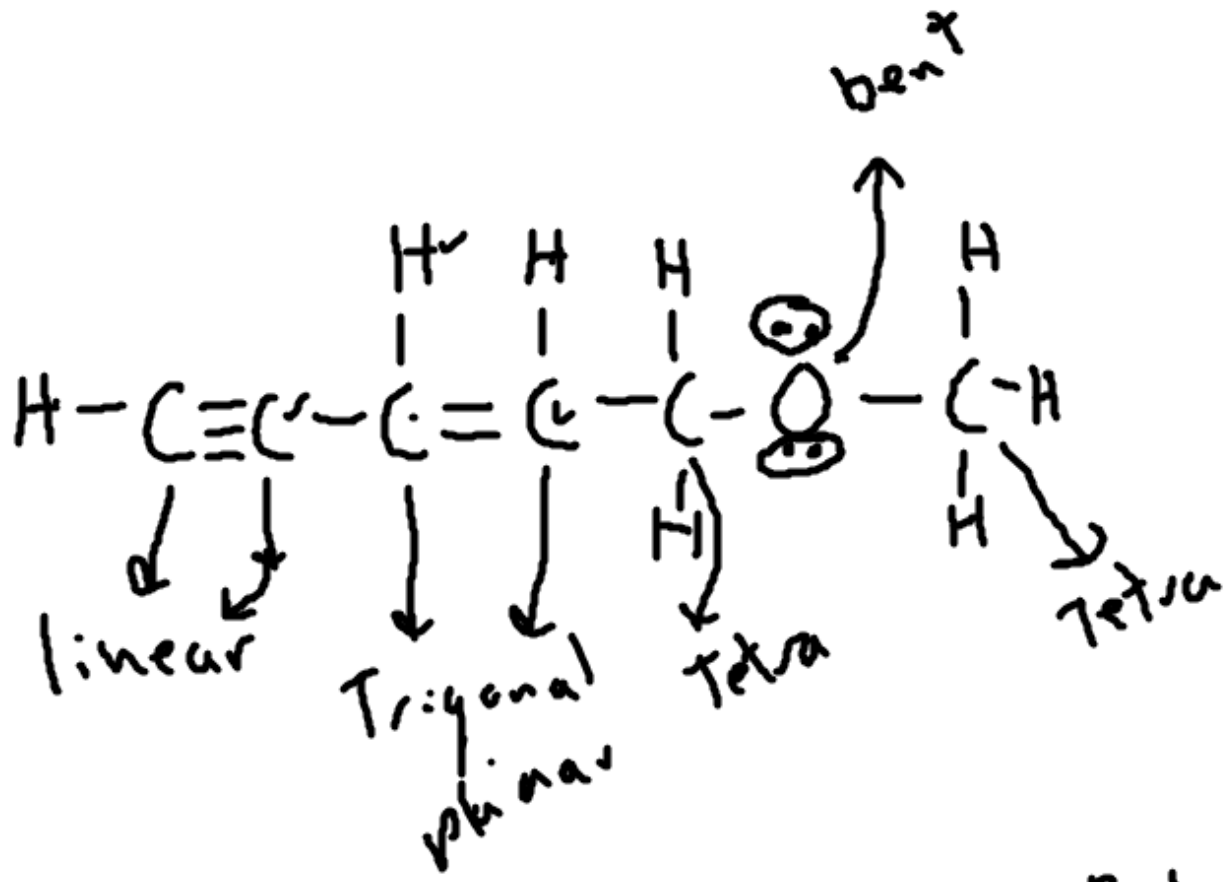
Larger molecules



Ethanol  $\text{CH}_3\text{CH}_2\text{OH}$







Sec 3.1 ( 3.1 ) ( 3.2 )  
 ( 3.3 )