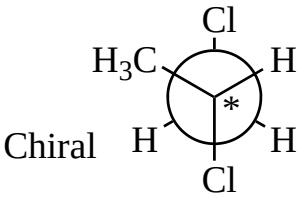
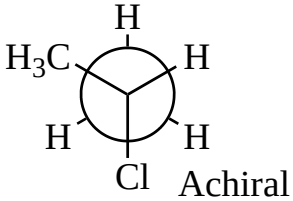
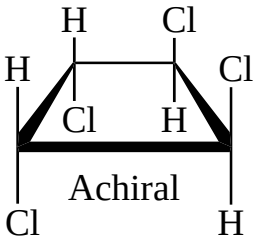
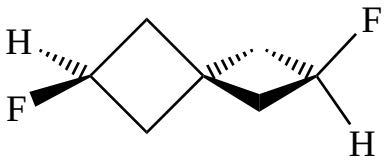
Ex 26A -Chirality/Optical Activity

Question One
Which of the following are chiral?

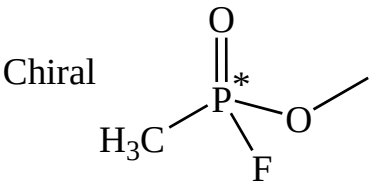








Chiral (Axially chiral)



Question Two
Label all the stereogenic atoms in Question One witn an asterix.

Question Three
You measure the rotation of an optically active compound in the class polarimiter and find it to be +160°. You then dilute the sample 1:2, measure it's rotation again and omigosh - it's now -100°!!! What the hell happened?

A 1:2 dilution halves the concentration and therefore must halve the measured rotation. If the measured rotation after dilution is -100°, then it must have been -200° before dilution. On a 360° scale, -200° looks the same as +160°.