Alkenes #2: Reactions of Alkenes—Tackling ALL of Them

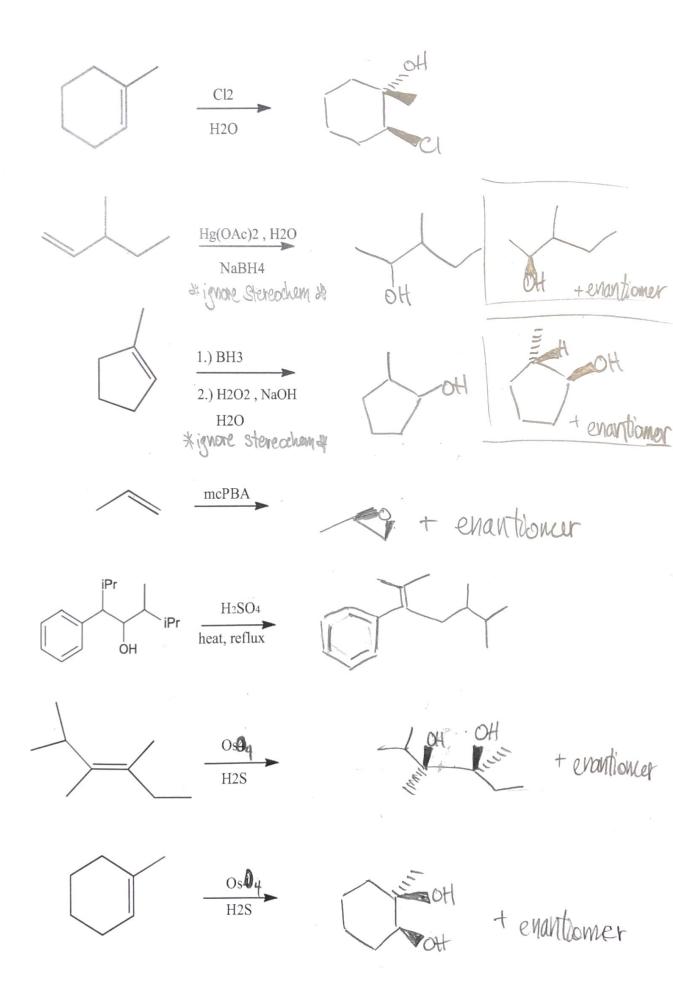
Okay, so here is where the meat of the Alkenes material is. There is a lot of terminology to know, reagents to memorize, and concepts to remember, but I made a little Alkene-Survival-Summary Sheet to help you not feel overwhelmed. **Know that sheet**, but when I say that, I don't mean memorize the reactions. Yes, you need to memorize the reagents, but **understand** the concepts at work. If you can do that, you can apply ANY reaction to ANY reactant and correctly predict the major organic product, leading you to organic success.

All right—without further ado, let's practice some alkene chemistry:

HI

HI

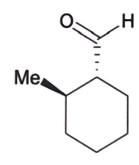
$$\frac{H20}{H2SO4, cold}$$
 $\frac{H20}{H2SO4, cold}$
 $\frac{Br^2}{CCl^4}$
 $\frac{Br^2}{CCl^4}$
 $+ enantlowner$



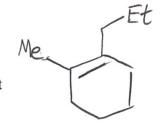
Okay, so I know that was A TON of reactions. But before we call it quits, I want to give you a few more, challenging problems. These problems are meant to be <u>harder</u>, putting a lot of the things you've learned in OChem I together. Do not sweat it if you don't get them on the first try, but make sure to look at the answers and *understand* them.

I know you've been working hard, and if you struggle at first, keep at it. Just like we've done this whole time, give a problem a go and check your answer. If you got it, awesome!. If not, see what went wrong, correct it, and give it another go in a little bit.

You are all doing great. The light at the end of the OChem 1 tunnel is near, so keep at it.

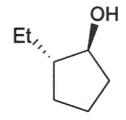


- 1.) EtMgBr
- 2.) H₃O +
- 3.) H₂SO₄, reflux, heat

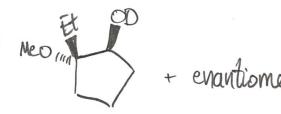


- 1.) LiAlH4
- 2.) H₃O +
- 3.) TsCl
- 4.) KOt-Bu
- 5.) HBr



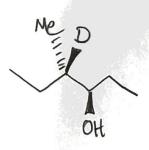


- 1.) SOCl2
- 2.) NaNH2, DMSO
- 3.) mCPBA
- 4.) MeOH, D₃O₊



- 1) LDA
- 2) 0504, H2S
- 3.) PCC (XS)

- 1.) NaNH2, DMF
- 2.) BD₃
- 3.) H2O2, NaOH, H2O



+ emntioner

-D & -OH, SYM