Homework Week 12

Concepts, Chapter 9: Naming alcohols and thiols, acidity and acid/base reactions of alcohols/thiols, converting OH into a good leaving group, oxidation of alcohols, diols and thiols.

Reactions:  
- Deprotonation of alcohols to make better nucleophile/strong base  
- Formation of alcohols and thiols via S_N1/S_N2 reactions or addition reactions  
- Conversion of alcohols to alkyl halides with HX, PBr_3 or SOCl_2  
- Formation of tosylates  
- Dehydration of alcohols with strong acid  
- Oxidation of alcohols to aldehydes, ketones, carboxylic acids  
- Oxidative cleavage of diols

Monday, May 6
- Read through Section 9.6A (if you haven't done so already)  
- Problems 14.10, 20b,c (formula is C_6H_{10}), 21(formula is C_4H_9Br), determine structure based on IR and 'H NMR--don't do a-c), 22a-d,f

Tuesday
- Finish reading section 9.6  
- Problems Chapter 9.1-7, 14-16

Wednesday
- Read sections 9.7-9.8  
- Problems 9.8, 18-22  
- Quiz Problems Lab Text (Mohrig, et. al): p 604-609: 3, 5, 6 (see structures below--turn these in as part of the quiz on Friday.)

Friday, May 10
- Finish reading Chapter 9  
- Problems: Chapter 9.26, 27, 29-32

Structures for problem 3, p. 604 from Mohrig, et. al.

- Biphenyl
- 4-Isopropylmethylbenzene
- Phenol
- 4-Methylbenzaldehyde
- Ethyl propanoate
- Benzophenone
- Acetamide