1. (6 points) Provide a correct name for each of the following molecules including any geometry





Name\_\_\_3-hydroxy-4,5-dimethylheptanal\_ Name\_\_\_isobutyl phenyl ether\_\_\_\_

 or isobutoxybenzene

1. (6 points) Draw the following molecule:

2-methyl-3-pentanethiol 3,4-dichlorocyclohexanone

  

1. (6 points) Complete the reactions drawn by filling in either the reactant or the products. If there is more than one product, draw only the **major product**. If there is no reaction write NR

 

 

1. (4 points) NAME the four *different* functional groups circled in this molecule.



1. (4 points) Which has the higher boiling point, 2-propanol or methyl ethyl ether? **Explain your answer using drawings to illustrate your reasoning.**

2-propanol has the higher boiling point because it can H-bond with itself, while methyl ethyl ether cannot.

