3. Draw the product(s) and mechanism of the following reaction showing stereochemistry in 3-D and all stereoisomers that are formed.

2. Show the starting materials and reagents (over the arrow) needed to accomplish the following conversions. Number the reagents if they cannot be mixed.

a) 

b) 

3. Give the product(s) of the following reactions showing stereochemistry in 3-dimensions where necessary and including all stereoisomers.

4. Draw (a) allyl alcohol and (b) ethyl phenyl ether

(a) 

(b) 

5. Circle the compound with the lowest dielectric constant and put a box around the one with the highest dielectric constant.