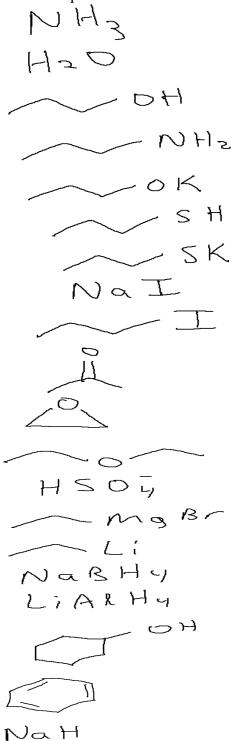
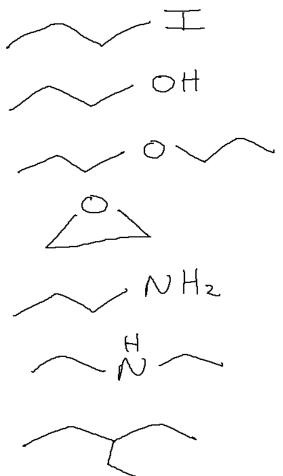
How to draw reasonable electron-pushing arrows Homework problems for video (8) Answers in video (9)

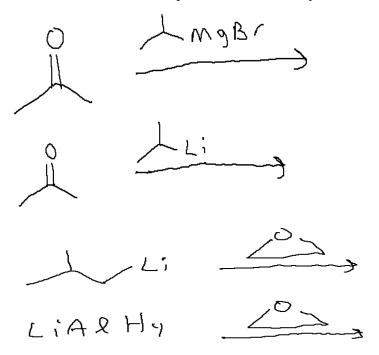
1. Label each of the following as a good nucleophile, poor nucleophile, or nonnucleophile:



2. Label each of the following molecules as either "has an acceptable leaving group" or "does not have an acceptable leaving group".



- 3. What happens to a neutral nucleophile after it attacks?
- 4. What sizes of ring have the least strain? What size ring has the most strain?
- 5. The following reactions are poorly designed to achieve the final product that the chemist probably intended. Fix the starting materials to correct the problem, and draw the mechanism and product for each of your new reactions.



6. Label each of the following molecules as "strong base", "weak base" or "not a base".

