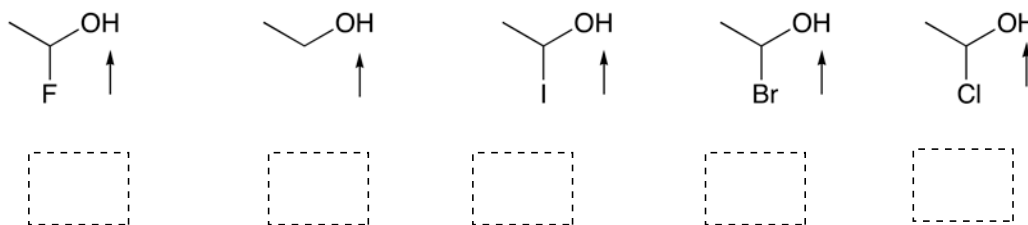
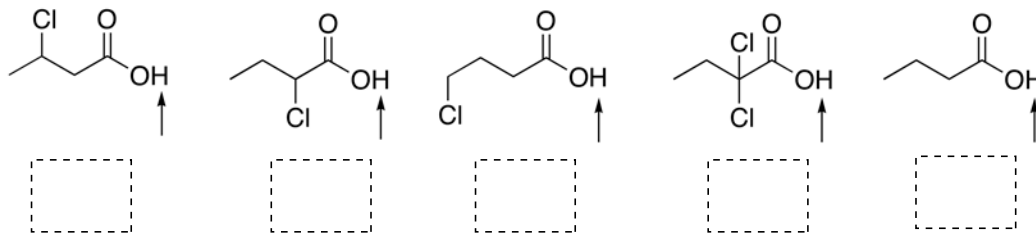
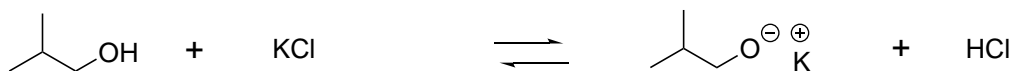
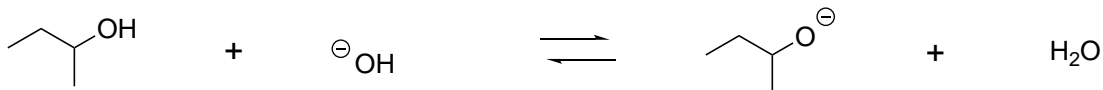
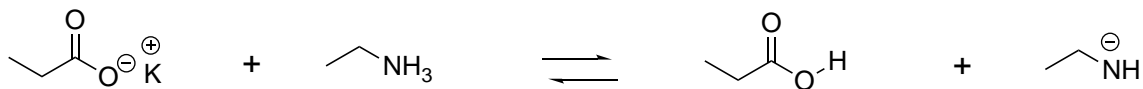


CEM 251, Problem Set 4: Chapter 4

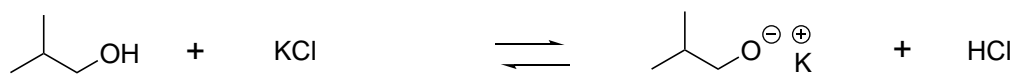
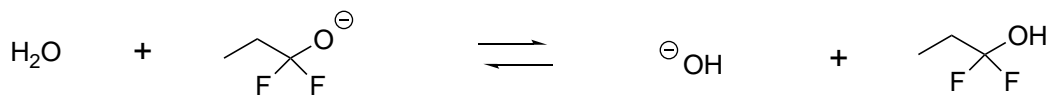
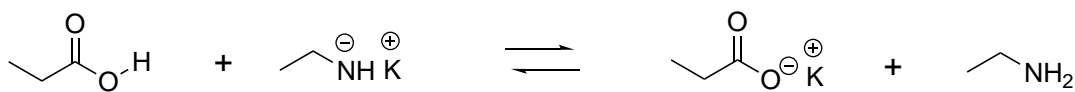
1. Rank the following molecules in order of increasing acidity of the indicated hydrogens:



2. For each of the following equilibria, label the **Acid, Base, Conjugate Acid** and **Conjugate Base**.



3. Which side of the following equilibria is favored? [Remember: The equilibrium wants to push towards the most stable conjugate base]



4. Which proton, Ha or Hb is more acidic? Explain your choice using resonance structures.

