

## Prelab 2a

**Reading assignment:** Techniques: Chapter 6.1-6.2, Essay 3 (pages 127-131), and Chapter 15 (except 15.7)

**Pre-lab questions:** If you handwrite answers to these questions on a piece of paper, (not your notebook) you will be allowed to use it during your prelab quiz.

1. What is the chemical structure of biphenyl? Is it polar or nonpolar? Would you expect it to be water soluble or insoluble?
2. What is the chemical structure of methyl orange dye? Is it polar or nonpolar? Would you expect it to be water soluble or insoluble?
3. What is the density of each of these solvents: methanol, acetone, dichloromethane, toluene, and hexanes?
4. Slow cooling of a saturated solution causes formation of pure crystals because \_\_\_\_\_.
5. The most important characteristic to consider in choosing a recrystallization solvent is \_\_\_\_\_.
6. Name three things to consider if you want to maximize the recovery of your product from a recrystallization.
7. What should you do if no crystals appear in your recrystallization, and you have already tried seed crystals and scratching the flask?