EXPERIMENT:

THIN LAYER CHROMATOGRAPHY

Name _____

Instructor _____

Chem _____ Section/Color _____

Date _____

These questions are to be completed and turned in at the beginning of the pre-lab period.

PRE-LAB QUESTIONS

1. Why should the jar used to develop the TLC plates be covered?

2. Suggest a reason that TLC plates that are stored in a highly humid room result in different R_f values than plates that are stored in a dehumidified environment. Hint: Consider the structure of the layered material on the TLC plates and how that material might interact with water molecules in the air.

3. Why should the 'spots' applied to a TLC plate be kept as small as possible?

4. Even if two spots have the same R_f value, we cannot be certain that the two samples are identical compounds. Suggest a good method to confirm that the two samples are the same or not the same.

5. Why is TLC a poor technique for the analysis of low-boiling liquids? (Hint: low-boiling means high vapor pressure at room temperature)

THIN LAYER CHROMATOGRAPHY

NAME_____

T.A._____/Color_____

Chem_____Sect_____Date_____

PRE-LAB WRITE-UP

This is to be completed prior to **the beginning** of the laboratory session.

Objective:

Experimental Procedure:

(Draw and label glassware setup or List equipment used)

Reagents:

Apparatus:

Safety:

_____

Teaching Assistant Initials

THIN LAYER CHROMATOGRAPHY **IN-LAB OBSERVATIONS**

This is to be completed during the laboratory period, signed by your TA, and turned in as part of the Laboratory Report.

Teaching Assistant Signature
(Must be signed before checking out of the laboratory)