

You will work in pairs on Experiment 5, and individually on Experiment 16.

Plan on completing the Experiment 5 parts on Tuesday and the Experiment 16 parts on Thursday.

• **Pre-lab:**

Read: Experiment 5 Parts A and C (pp. 42 – 45, 46 – 48), Experiment 16 Parts A and C (pp. 136 – 138, 141 – 142)

Skim: Technique 20 (pp. 777 – 792), the first four sections of Technique 19 (pp. 756 – 763) may be helpful.

Prepare for class on Tuesday, February 26: “Purpose,” and “Materials and methods”.

Under “Purpose”, you will be performing one reaction; write the chemical equation for the reaction here.

In the “Materials” section, note that you and your partner will receive a total of two TLC plates. One will be for Experiment 5A and the other for Experiment 5C.

In the “Materials” section, you should break up the list of chemicals into four different parts: chemicals for Experiment 5A, chemicals for Experiment 5C, chemicals for Experiment 16A and chemicals for Experiment 16C.

Reserve the next few pages for “Procedure” and “Data” and “Results”.

For the “Procedure” section, it will be fine to photocopy (or hand copy) the directions from PLKE and tape them into your notebook.

For the “Data/Analysis” section: You will sketching *both* your TLC plates for Experiment 5A and 5C, and your TLC plate for Experiment 16C, so leave a few blank pages.

Make a table near the sketch of the plates that looks like:

Migration distance (mm)	Solvent front distance (mm)	R _f value

There may be many rows in each table.

Goal for Tuesday: do both parts of Experiment 5 with your partner. Identify the unknown in 5A.

Goal for Thursday: do both parts of Experiment 16. Bring in colored produce, if you wish.

• **Post-lab:**

In the “conclusion” section:

Answer points 2 and 3 under “Report — Experiment 5A” on page 50 of the text.

Answer just question 4 under “Questions” on page 142 of the text.

• **Lab Result Report: (Due Tuesday, March 4 at the beginning of lab)**

Photocopy the lab, all parts.

Answer problems:

End of Technique 20 (page 791): 1, 3

No abstract is needed.