

Name:

Date:

Form:

Subject: Chemistry Lab II

Title: Separating Mixtures using Paper Chromatography

Objectives

- To use paper chromatography to identify whether certain coloured inks are pure or mixtures.
- To identify components of ink by calculating Rf values

Materials

1. Filter Paper
2. Markers
3. Small glass container
4. Ruler
5. Pencil
6. Paper/paper towel
7. Water/ Alcohol

Method

In steps (1, 2, 3, etc.) write how this experiment was carried out.

Observation/Results

What did you observe when you placed the strip of filter paper with the ink mark into the solvent (water/alcohol)?

Calculate the R_f values for the different pigments observed on the chromatogram.

R_f = Distance travelled by the solute (dye or pigment) from the ink spot to the final spot on the chromatogram / Distance travelled by the solvent (water or alcohol).

Discussion

In no less than two paragraphs (5 sentences each):

Discuss the concept of Paper Chromatography and how it can be used to separate mixtures.

Include the following terms: mobile phase, stationary phase, chromatogram

Discuss real life science applications of paper chromatography?

Marking Scheme

Criteria	Marks
Complete list of materials	1
Method written in sequential order (1, 2, 3 etc.).	3
Observation/Results (<i>at least one paragraph with correct grammar</i>).	5
Discussion (<i>at least two paragraphs with correct grammar, explaining the process of osmosis and how it occurred in this experiment</i>).	11
Total	20