Chem 100: Chromatography Name: _____

I. Skittles

List each color present in the chromatogram and its Rf value in the table:

| **Candy Color** | **Distance Solvent Moved** | **Component Color** | **Distance Component Moved** | **Component Rf** |
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Which component had the highest Rf? Is this the most or least polar molecule?

Why is it important to maintain the chamber solvent level below the baseline?

Why is it important to mark the solvent front immediately after removing the paper from the chamber?

II. M and Ms

List each color present in the chromatogram and its Rf value in the table:

| Candy Color | Distance Solvent Moved | Component Color | Distance Component Moved | Component Rf |
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Does there seem to be any dyes that are shared between M and Ms and skittles? How can you tell?

Is it at all possible to tell the difference between two substances that have the same Rf values? Why or why not?

If you used isopropyl alcohol (less polar than water) as the solvent instead of water, would you expect the largest Rf to be larger or smaller? Why?