**PAPER CHROMATOGRAPHY**

To perform ink chromatography, you put a small dot of ink to be separated

at one end of a strip of paper. This end of the paper strip is then placed in

a solvent. The solvent moves up the paper strip; and, as it travels upward it

dissolves the mixture of chemicals and pulls them up the paper. The chemicals

that dissolve best in the solvent will move up the paper strip further than

chemicals that do not dissolve as well. What is produced from this method is a

chromatogram.

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| --- | --- | --- | --- | --- | --- |
| MARKER # |  |  |  |  |  |
| Colors observed in ink sample |  |  |  |  |  |

After observing the paper chromatogram from each team’s marker:

1. What happened to the black ink?

2. Identify the solute and solvent for this experiment.

Solute = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Solvent = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. What do you think would happen if you used a permanent marker? Why?

Forensic scientists are able to use ink chromatography to solve crimes by

matching documents or stains found at a crime scene to the marker or pen that

belongs to a suspect. Forensic scientists analyze the unknown ink and compare

it to writing utensils collected from possible suspects. 