

Glue this side
down into your
science notebook using
only 4 dots of glue.

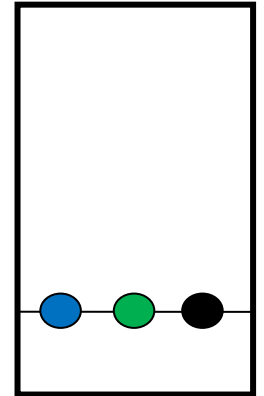
“A dot is a lot!”

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5th grade science
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Chromatography Lab

What is Chromatography?

Chromatography is the physical separation of a mixture into its individual components. The word comes from the Greek *chromatos* (color) and *graphein* (to write).



Procedure:

- 1 Using your pencil and a ruler, measure **2 cm** from the bottom edge of the filter paper and draw a line across.
- 2 Choose 3 different colored markers, one must be black.
- 3 On the base line dab one color at a time, about **10 times** each, to make each spot. The 3 colors should *not* touch each other.
- 4 In a clear plastic cup, add a small amount of rubbing alcohol about 15 mL.
- 5 Place the filter paper *slowly* and vertically into the cup and let it sit for about 10-15 minutes, until the alcohol is about $\frac{3}{4}$ of the way up.
- 6 Do not let the spots submerge into the alcohol.
- 7 Record all your observations using descriptions and diagrams on the next page.

Observations of My Chromatography Experiment:

I started with _____, _____, and _____ .

Sketches	Observations
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Analysis/Results:

1. Name the three colors you started with and compare them to the colors you ended up with. Explain what happened.
2. Name the solvent used in this experiment.
3. Are the dyes found in markers considered a mixture? Why/Why not?
4. Were the dyes in the marker physically or chemically combined?
5. What did you notice about how far each color travelled up the filter paper?
6. Once it is dry, attach the filter paper with tape or glue on your analysis page.

Conclusion: 2-3 complete sentences on what you learned by doing this lab.