

CAMERON UNIVERSITY STUDENT CHAPTER CHROMATOGRAPHY BUTTERFLY

In this exercise you will construct a colorful butterfly. When a dye is streaked across a paper and then a solvent such as water or alcohol is allowed to come in contact with the dye, it will spread out as the solvent travels along the paper. This principle is known as chromatography. Color markers are made by adding dyes to felt tips. We will make a butterfly by first drawing designs using colored markers on two coffee filters and then adding isopropyl alcohol (also known as rubbing alcohol) to the colored coffee filter to make the dye spread out. As the alcohol spreads out over the paper it will carry a dye with it and make a design. The more dye you add to the paper the more colorful your butterfly will be.

Materials:

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| 2 Coffee filters | 4 or 5 colored markers |
| Isopropyl alcohol | 1 small beaker or plastic cup |
| 1 plastic dropper | |

Instructions:

1. Place a coffee filter on a paper towel using at least three or four color markers. Make a large dot at the center and then add a series of swiggly lines out to the edge of the coffee filter. Alternate the colors all the way to the edge of the filter. Repeat with the other coffee filter. You may want to use a different set of markers for the second filter. Use your creativity to create a colorful design.
2. After both filters are colored, use a dropper to slowly add isopropyl alcohol to the filter beginning in the center and spreading it to the edge of the filter.
3. Place each filter on a dry paper towel and allow them to dry.
4. After the filters are dry, place one on top of the other and pleat them from the edge in. Twist two large colored pipe cleaners together and attach them to the center of the pleated fold to make the abdomen and antennae for the butterfly.
5. A sample butterfly will be prepared for you to use as a pattern.
6. Have fun with your butterfly. Make sure an adult is with you to assist you in measuring the isopropyl alcohol (rubbing alcohol).

The Cameron University ACS Student Chapter provides you with the instructions for constructing a Chromatography Butterfly. Cameron University is located in Lawton, OK. Contact us at annn@cameron.edu.