

# Chromatography Butterflies



## Supplies Needed:

- Black Pipe Cleaner
- Mr. Sketch Marker
- White Coffee Filters
- Cup of Water
- Pencil
- String
- Scissors

## Instructions:

1. Choose a marker
2. Draw a circle around the inside flat area just before the ridges of the white coffee filter, like done in the image below.
3. With a pencil, write the color of marker used.
4. Take a moment to guess what colors you will see after separation.
5. Fold the filter in half then in half again to form a cone shape
6. Balance the filter in a glass of water so that the very tip of the filter is in water. Make sure that the water does not reach the line where the marker is drawn.
7. Watch and wait to see what happens as the water reaches the top edge of the filter. Place filter on a paper towel or newspaper to dry.
8. Once dry, look at the results. What colors did you see? Did they match your hypothesis?
9. To make a butterfly, take a half of a pipe cleaner and wrap it around the center of one of the coffee filters
10. Shape the ends of the pipe cleaner into antenna and tie a string to hang it up.



## What did you learn?

Chromatography is a process that is used for separation. This technique is used in chemistry to better understand the make-up of a substance. Here the colors in the marker are separated through the filter. **Which marker produced the most colors?**

Obtained from buggyandbuddy