



Chromatography Butterfly Craft

Materials for Science Experiment & Butterfly Craft

* Non permanent markers (Over the years I've found **Mr. Sketch markers** work the best in this experiment.)

- **White coffee filters**
- Pencil
- Cups of water
- **Black pipe cleaners**
- String
- Scissors

Procedure to Chromatography Science Experiment

1. Choose one **marker** to experiment with first. (Hint~ black and brown are the most exciting!)
2. Take one **coffee filter**. Put it on a newspaper or some kind of material to protect your table. Draw a thick circle around the center of the coffee filter where the ridged part meets the flat center. Use a

pencil to write the color of the marker being used right in the center. (You'll want to know what the original color was being used, and the



pencil won't smear and will remain intact after the experiment.

3. Fold the coffee filter in half and then in half again, resulting in a cone shape.
4. Get a short glass of water. Pull apart the cone shaped coffee filter so it balances right on the glass with the tip of the cone just touching the water. (Be sure NOT to let the marker circle go in the water, just the uncolored tip of the coffee filter cone.)
5. Let it sit and watch what happens as the water begins to flow up the paper.
6. Repeat with different colored markers. Here are ours starting out
7. After the water has reached the outer edge of the coffee filter, place it on a newspaper to dry. (Lucy and her friend enjoyed illustrating their predictions on paper while waiting for each color to finish separating.)



8. Once the coffee filters are dry you can observe the results.

Directions for Using Coffee Filters to Make the Butterfly Craft

1. Cut your black pipe cleaners in half.

2. Take one **coffee filter** and scrunch it up in the middle.

3. Wrap a black pipe cleaner around the center.

4. Shape the ends to form antennae.



5. Tie a string to the center and hang!



Watch it in action!

Question to Spark More Curiosity & Critical Thinking

What colors do you see? How many colors do you see? Which one do you find most interesting? Why?

Don't forget to **follow your child's lead** and let your him/her explore some more! Lucy and her friend wanted to try all the different colors to see if they'd separate. They wondered if the marker would separat