

DETECTIVE NOTES

Case File: 11

Resource 11-1

At-Home Chromatography and Craft

60 minutes

• Materials:

- ▷ Non-permanent markers in different colours (Mr. Sketch markers work really well, but any brand will work!)
- ▷ Newspaper or scrap paper to protect your table
- ▷ White coffee filters
- ▷ A pencil
- ▷ Cups of water, with a few centimeters of water in each (one for each coffee filter you would like to use-short cups are best!)
- ▷ Black pipe cleaners
- ▷ String
- ▷ Scissors

Chromatography Experiment:

1. Choose one marker to experiment with first. Black and brown are the most exciting to use!
2. Ensure you have placed down some newspaper or scrap paper to protect your table, then take a coffee filter and colour a thick circle around the centre of the coffee filter, where the ridged part meets the flat centre (see photo to the right). Using your pencil, write somewhere on the coffee filter what colour of marker you used



3. Fold the coffee filter in half, and then in half again, creating a cone shape
4. In one of your cups of water, place the coffee filter in the cup, and pull it apart so that it balances on the cup with the tip of the cone just touching the water (see photo to the right). Be sure NOT to let the marker circle go in the water, just the uncoloured tip of the coffee filter cone.





5. Let the filter sit and watch what happens as the water begins to soak up the filter. Repeat this with different coloured markers.
6. Let your coloured coffee filters fully dry before completing the following steps for the craft!

Chromatography Craft:

1. Using scissors, carefully cut a pipe cleaner in half.
2. Taking one of your coffee filters, scrunch it up in the middle, and wrap a piece of pipe cleaner around the centre. Shape the ends to form antennae.
3. Tie a string to the centre of your coffee filter butterfly, to hang it for display!

