Chromatography Chemistry Experiment

This chemistry experiment is designed to introduce the process of chromatography which scientists use to separate mixtures.
You will use everyday objects to conduct this experiment.

Supplies and Instructions

- 1 Black washable marker
- 1 Paper towel
- 5 Clear plastic cups
- 1 Piece of paper
- Water
- Scissors

- **See step by step instructions on the other side of this hand-out.**

Questions for Discussion

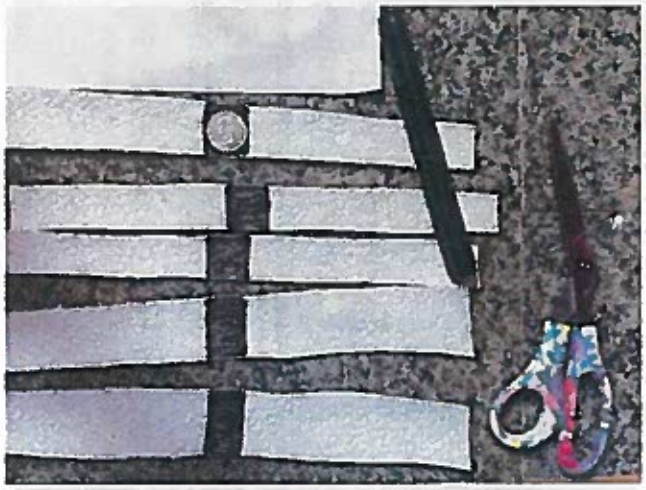
- What do you think will happen when you put the paper towel in the cups of water?
- What happened? Did you see the ink from the marker start to move up the paper towel? This is called capillary action.
- What colors is black ink made of? Black ink is made of a lot of different colors. These are called pigments.
- Why do you think the colors separated on the paper towel? The water separated the black ink into its parts (components)by carrying it through the paper towel. This is called chromatography.

This activity was adapted from ACT Now: a statewide coalition that works to ensure youth have access to quality and affordable afterschool opportunities

Chromatography Handout

Step 1: Cut your paper towel into 5 strips (long pieces).

Step 2: Use your black marker to color the center of each strip of paper towel.



Step 3: Put a small amount of water in the bottom of each of your 5 cups (about 1 inch of water).

Step 4: Fold each of your 5 strips of paper towel in half with the part that you colored at the fold. Put 1 piece of paper towel in each cup with the colored center in the water. Let the ends of the strips hang over the sides of the cups.

Step 5: Let the paper towels stay in the cups for a few minutes. Then, take them out and lay them flat on a piece of paper to dry.

Look at your paper towels. What colors is black ink made of?