

# Chromatography for Kids

Did you know that inks and markers are often combinations of several colored dyes? We can separate these combinations of colors or pigments through a process called *chromatography*. Here's how to get started:



## What You Need:

- Coffee filters
- Clear plastic cup
- Water
- Tablespoon
- Water soluble colored markers
- Paper towels
- Clothespins and adhesive magnet strips
- Chenille stems (pipe cleaners)

## What You Do:

1. Use a pencil to make a mark on a coffee filter about two inches from the bottom.
2. Give your child the coffee filter and ask him to fold it in half.
3. Use water soluble markers to decorate the bottom of the coffee filter above the 2-inch mark.
4. Add 2 tablespoons of water to the cup.
5. Fold the coffee filter in half and then in half again and place it in the cup.
6. Watch the colors move up the filter. Talk about the different colors that appear on the filter as the filter absorbs the water.
7. Unfold the filter and place it on paper towels to dry. Once the filter is completely dry, your child can use his science project to make a pretty craft project! Allow your child to showcase the results of the chromatography experiment by making a butterfly magnet or a flower.

## What's Happening?

When the liquid creeps up the coffee filter, it dissolves the coloring molecules and splits it into different colored chemicals. Different colors get carried along faster and farther than others because some color molecules are bigger and heavier than others.

## Turn Science Into Art!

- To make a butterfly magnet: gather the filter into a clothespin to resemble a butterfly; place a piece of the magnet strip on the back of the clothespin and display on your refrigerator.
- To make a flower: fold the filter into fourths and twist the chenille stem around the bottom, then fluff the filter so that it looks like a flower.