

Chromatography Flowers

Objectives

- ❖ Observe the process of Chromatography (separation of mixtures)
- ❖ Identify which colors make up the color black

Duration

- ❖ 30 min

Material	Quantity
Mr. Sketch Markers	1 Pack
Beaker	1
Eye Dropper	1
Coffee Filter	3
8.5 x 11 White Paper	6 Pieces
Pencil Crayons	1 Pack
Water	1 cup

Procedure

1. Explain that sometimes chemists have to separate mixtures. For example: separating proteins out of mixtures. This process is called Chromatography.
2. Ask your child what colors make up the color black? Today, we will find out!
3. Give your child a coffee filter, beaker, eye dropper and black marker.

4. In the center of their coffee filter, have them draw a dotted outline of a nickel with the black marker. See the image to the right.

5. Now, have them place their coffee filter with the dotted black circle on top of an empty beaker to elevate it.

6. Using an eye dropper filled with water, have them drop 5 drops of water in the center of the filter.

7. Now observe what happens to the black ink. They should see the colors separate.

8. Set the first filter aside and let it dry. Label it "black marker".

9. Follow the same process with a brown marker, green, pink, etc. Allow your child to be creative in seeing how colors will separate.

10. See the example to the right on how your child can think outside the box and use multiple colors.

11. Once your child has made a few different flowers, discuss what trends they noticed. Which markers/colors produced the most colorful flowers? Why or why not? Etc.

12. Allow your child to cut out their favorite coffee filter flowers and glue it onto a piece of paper. They can color/decorate this paper to look like a real flower as they wish. See the picture above.

