COLORS: CHROMATOGRAPHY

ULYSSES PHILOMATHIC LIBRARY SCIENCE AT HOME

THE STEP BY STEP

1 - Draw an image on a coffee filter using a marker

2 - Place one side of the filter paper into a cup or dish of water

3 - Observe what happens to the image as the water is pulled across the paper

4- Color another filter with marker and place a few drops of water in the middle of the image (instead of placing one side in the water). Does anything different happen?

ADDITIONAL QUESTIONS

What happened to the images made with marker? What changed? What stayed the same?

Markers combine different dyes to produce a single color. How many different colors can you see after the water has moved through your image?

How did the water move across (or through) the coffee filter? How did it carry the color?

How do you think an artist could use chromatography? How do you think a scientist might use chromatography?

ADDITIONAL RESOURCES

Basics of Chromatography
https://www.youtube.com/watch?v=SnbXQTTHGs4

Be a Color Detective
https://www.scientificamerican.com/article/chromatography-be-a-color-detective/

Chromatography: explained
https://www.explainthatstuff.com/chromatography.html

Exploratorium: hidden colors
https://www.exploratorium.edu/science_explorer/black_magic.html

Tosho BioSci: Chromatography
https://www.youtube.com/watch?v=2QVCxK0QPeg