Chromatography Butterflies

Get ready for a colorful and magical adventure with our Chromatography Butterflies experiment! In this experiment, we'll draw colorful butterflies on special paper and then dip them in water. Watch as the colors come alive and spread, creating beautiful patterns like magic!

Materials

- Markers
- Coffee filter paper
- Water
- Bowl

Science Behind the Experiment

The Chromatography Butterflies experiment demonstrates the science of chromatography, a technique used to separate and analyze different components of a mixture based on their solubility and attraction to the solvent (in this case, water).

As the water moves up the filter paper, it comes into contact with the pigments in the ink. Some pigments are more attracted to water and will dissolve readily, while others are less soluble and will move at a slower rate or not at all. This difference in solubility causes the pigments to separate and spread out along the filter paper.

This experiment is a fascinating way to see the individual colors in the ink and observe how they interact and create beautiful patterns on the filter paper.

Step 1: Draw Butterflies

Use markers to draw colorful butterflies on coffee filter paper. Get creative with different colors and patterns!

Step 2: Dip in Water

Dip the bottom part of the coffee filter paper (where the butterflies are) into a container of water. Make sure the water only touches the bottom part, not the butterflies.

Step 3: Watch the Magic

As the water moves up the filter paper, watch the colors from the butterflies spread and blend, creating beautiful patterns like magic!

Step 4: Let it Dry

Once you're happy with the patterns, take out the filter paper and let it dry. You now have your own colorful butterfly chromatography art!