



AT HOME EXPLORATION DAY

ACTIVITY 1: CHROMATOGRAPHY FLOWER MAKING

Materials Needed:

- White coffee filters
- Paper
- Mr. Sketch markers (or any water-based marker)
- Cups with water in them (filled only a little so only the tip of the filter hits the water)
- Scissors
- Clear tape
- Small sticks/twigs



Directions:

Explain to them that chromatography is the separation of a mixture by passing a solution through a medium. In this case, we'll be separating the colored ink in markers with water using white coffee filters

1. Have each child/family member choose a marker
2. Place a piece of paper in front of each person
3. Put the coffee filter on top of the piece of paper (the paper is meant to avoid as much mess as possible because the marker will go through the coffee filter)
4. With their marker, draw a thick circle around the center of the coffee filter (where the ridged part meets the flat center) - the thicker the better
5. Fold the coffee filter in half, then in half again (should be a cone shape)
6. Open up the top of the cone shaped filter so it balances on top of the cup
7. Make sure the tip of the filter is just touching the water
Do NOT let the marker circle go in the water (if it does, just have them start again)
8. Let it sit in the water and watch what happens, they can walk around and see what is happening for the other coloured markers
9. Let them sit until the colour reaches the edge of the filters
10. Let them dry - unfold them and set them on a piece of paper to dry so colours don't transfer onto the table
11. Once dry, can trim off outer white edges
12. Fold filter in half 4 times
13. Bunch it up and press the center together
14. Use the tape to attach it to the stick/twig
15. Can go out into your yard or an outdoor walk to collect the sticks