

Chromatography Activity

Name: _____

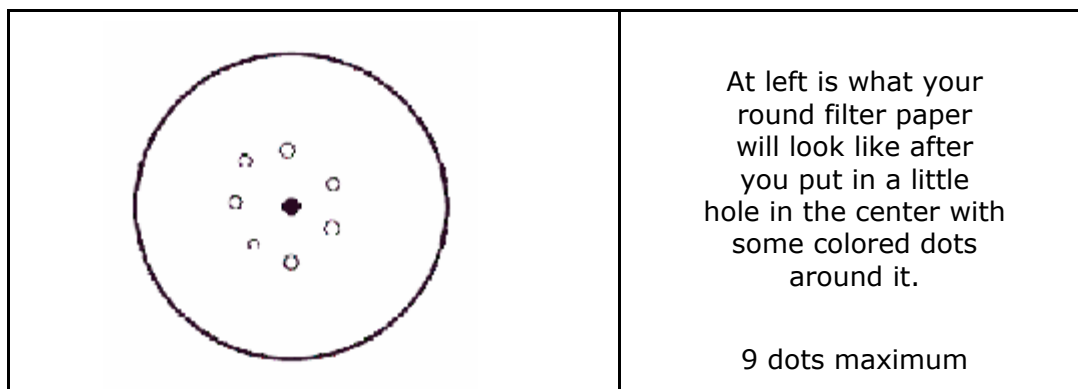
due: _____

Objectives: To learn about and practice paper chromatography, and learn more about mixtures and pure substances. We will separate a mixture of inks using paper chromatography

Materials: several black and other color felt tip markers (use the overhead fine tip kind), round filter paper, water, beakers, pencils, tape, pencils, scissors, metric rulers.

Procedure: Students will punch a 2 mm hole in the center of a round piece of filter paper. Place up to nine dots of colored ink around this hole - as shown in the diagram. Use several colors. Cut one eighth of a round filter to use as a wick. Fold this wick tightly and repeatedly (don't roll it and don't just fold it one time). Put the tip of the wick into the hole of your filter paper - which will work as chromatography paper. Fill a small beaker about one centimeter of water. Place your filter paper wick into the top of the beaker so that the wick is inside the water. Watch the teacher demonstration.

Watch the water rise up and spread into the chromatography paper. Note what happens to each color. Repeat if you have time, taking care to choose colors to make a nice design. Make a new wick for this 2nd step.



For Home Work (attach loose leaf paper, complete sentences, you know the drill)...

1. Describe what happened once the water started to spread out on your chromatography paper.
2. What appeared on the filter paper after the water spread through it?
3. What did this result indicate about the nature of the inks; is the ink a pure substance or is it a mixture?
4. Name four pure substances and four mixtures.
5. Take the filter paper home, show it to someone in your family. Tell them what it is and how it came about.
6. Explain to them what the difference between a mixture and a pure substance is. Describe for them how you made it. Be prepared to speak aloud about your doing this tomorrow in class.