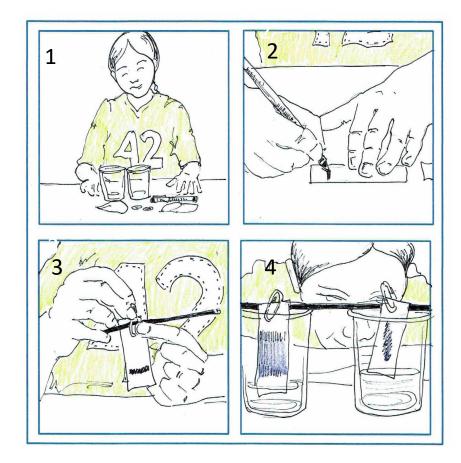


What colors make up the ink in my black felt-tip pen? To find out, it takes a little water, patience and blotting paper

In this experiment, we will copy a technique commonly used in laboratories to separate different chemicals that are present in a mixture. — in this case the ink in a black felt-tip pen. The technique is called chromatography.

When we deposit the black ink on a blotting paper, each of its components will interact of a different way with the paper and water. It is a kind of race where the components in of the ink finish by separating (because they do not move not all to the same speed when exposed to water), revealing the palette of colors present in a simple black felt.



- 1. For this experiment, Emma needs of blotting paper (from coffee filters, by example), of a pair of scissors, of two transparent glasses, a black felt pen, two paperclips, and two wooden sticks.
- 2. Our young chemist cuts two rectangles from the blotting paper. On the first, she draws a point. On the second, a line. Each time to about one-half inch from the edge as on the photo.
- 3. It is then a question of fastening the rectangles of blotter paper onto the sticks using the paperclips. The operation is delicate and the help of a adult may prove necessary
- 4. Emma fills the 2 glasses with a little water, just enough for the end of the blotter paper to become wet. Then she balances the sticks on the edge of the glasses water. The only thing left to do is to observe the colors that are revealed as the water is drawn up the paper and the ink is dispersed.



