

Chromatography

Mix a few drops of black, red, yellow and blue ink. Place a few drops of this ink on a chalk about 5 mm. from the thick end. Dry the chalk in sunlight. Now stand the chalk in a lid containing water. Fig (1). The ink band should not be in direct contact with the water. After some time the water rises up the chalk and the different colours are separated in distinct bands. Fig (2).

Take a strip of blotting paper and place a small drop of the mixture ink on it about 1 cm. from the end. Dip the strip in water and fold and rest the other end on a broomstick on a glass. Ensure that the water level in the glass is below the ink dot. Fig (3). After some time as the water rises on the blotting paper, the colours of the ink mixture are dispersed in distinct bands. Fig (4):

.Make a 5 mm. hole in the centre of a circular blotting paper. Mark a circular mixture ink ring slightly away from the hole. Place a wet cotton wick in the hole and rest the paper on a tumbler with the wick dipping in water. After a while the ink mixture is dispersed in beautiful circular bands. Fig (5). This technique known as chromatography is used for separating mixtures in several industrial processes.

