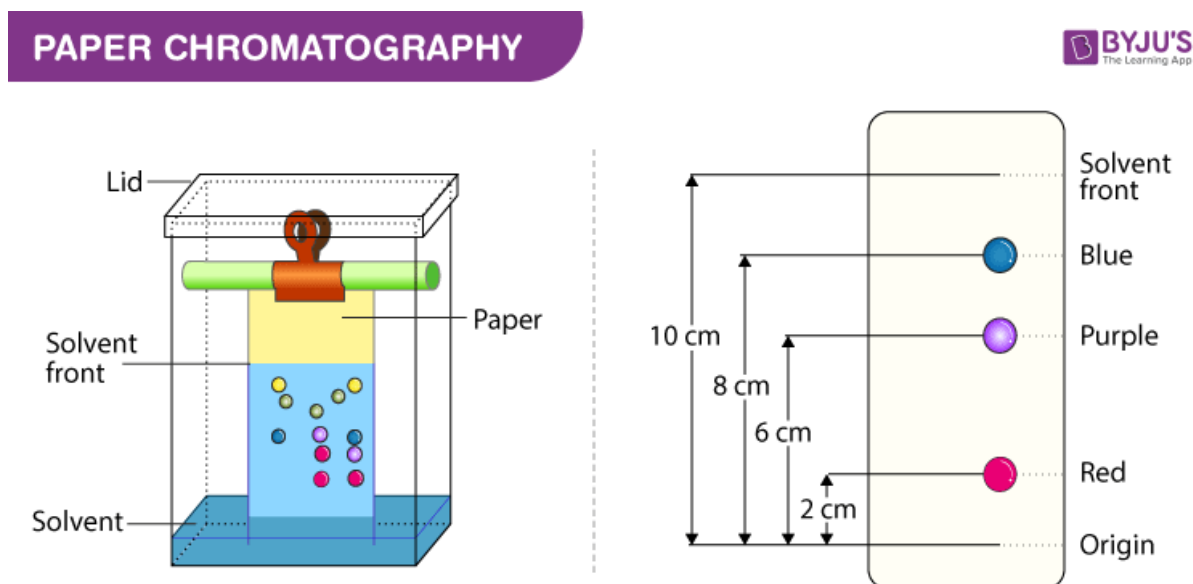


Partition Chromatography

Partition Chromatography Principle

The separation of the components from the sample mixture is carried out by the process of partition of the components between 2 phases. Both phases are in liquid form. In this process, the immiscible solid surface coated with the liquid surface on the stationary phase is in the mobile phase. The liquid surface is immobilized by a stationary phase which results in making its a stationary phase. The mobile phase moves from the stationary phase and components get separated. The separation depends on different partition coefficient.

Partition Chromatography Diagram



Partition Chromatography Procedure

Below we have explained the procedure to conduct [Paper Chromatography](#) Experiment for easy understanding

Apparatus required – chromatography jar, liquid impregnated paper (stationary phase), capillary tube (to apply sample mixture), mobile phase (example chloroform, methanol, acetone, ethanol).

1. Take a clean and dry chromatography jar.
2. To make sure that the environment of the jar is saturated with solvent vapors, a paper impregnated in mobile phase is set to the walls.
3. Add mobile phase to the jar. Around 0.5 cm to 1 cm from the bottom of the jar.
4. Close the jar.
5. Allow attaining equilibrium.
6. Mark the baseline on adsorbent.
7. Apply sample to the paper with the help of capillary tube.
8. Air-dry the sample spot.
9. Place the paper in the jar and close it.

10. Allow the system to stand till the solvent moves to some distance from the baseline.
11. Take out the paper and dry it.
12. If the sample components are separated showing colors then dry it in ordinary light. If it is a colorless component then dry it in UV lamp.
13. Store the chromatogram
14. Calculate R_f value.