Paper Chromatography

All the compounds to be separated will dissolve in the solvent used.

The solvent from the bottom of the jar moves up the paper by capillary action. As it moves past the dot of the mixture, all the compounds dissolve in the solvent. The compounds begin to move up the paper with the solvent. But! Each of the compounds interacts with the paper a bit as it moves. Each of the compounds interacts with the paper differently and gets slowed down by different amounts. Gradually the ones with least interaction get away from the ones with more interaction. The mixture separates into a series of individual components.

Imagine that some of the dyes are slippier than others. They slide past the paper more easily and so are dragged up the paper more quickly by the solvent.