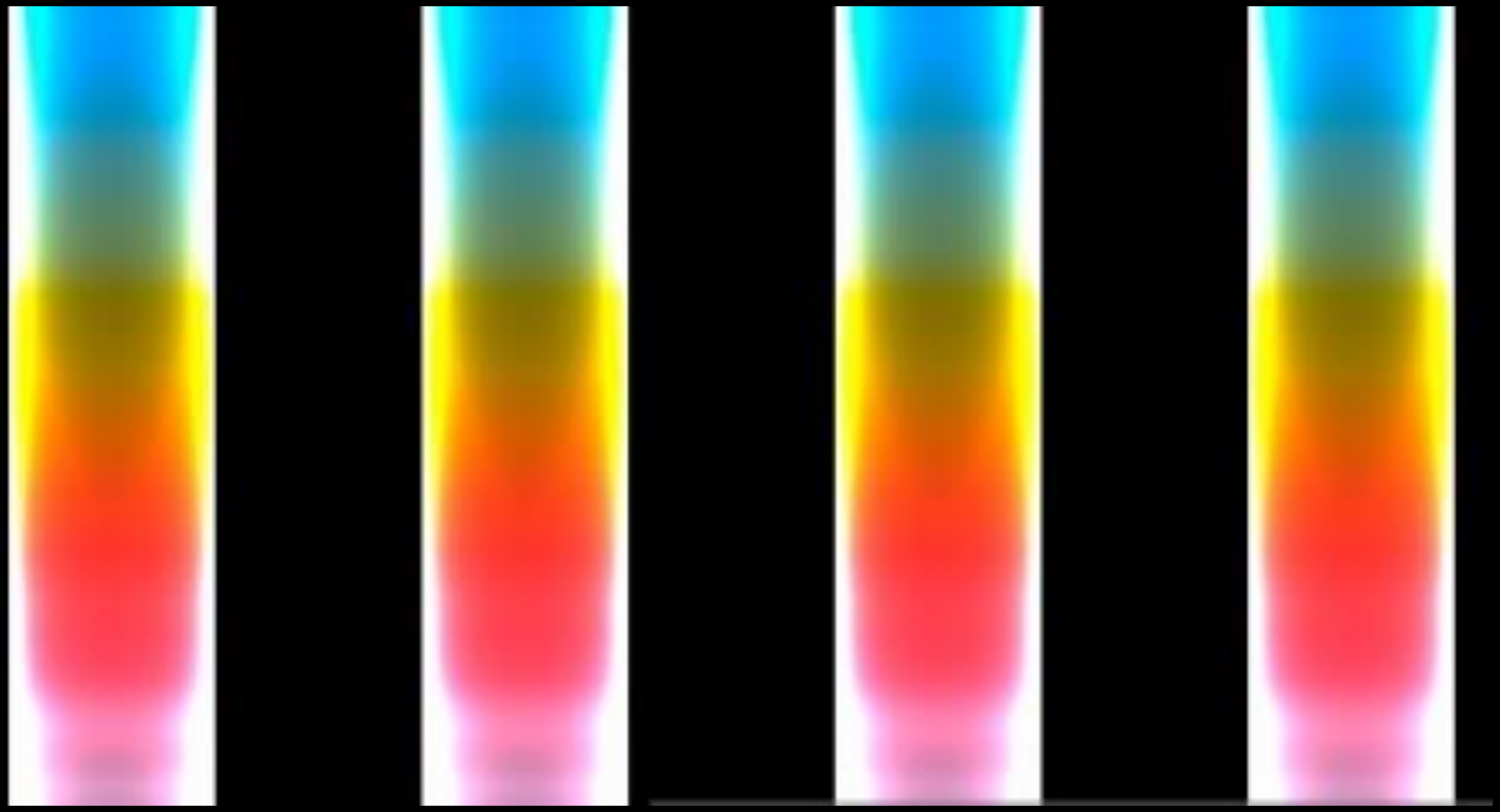
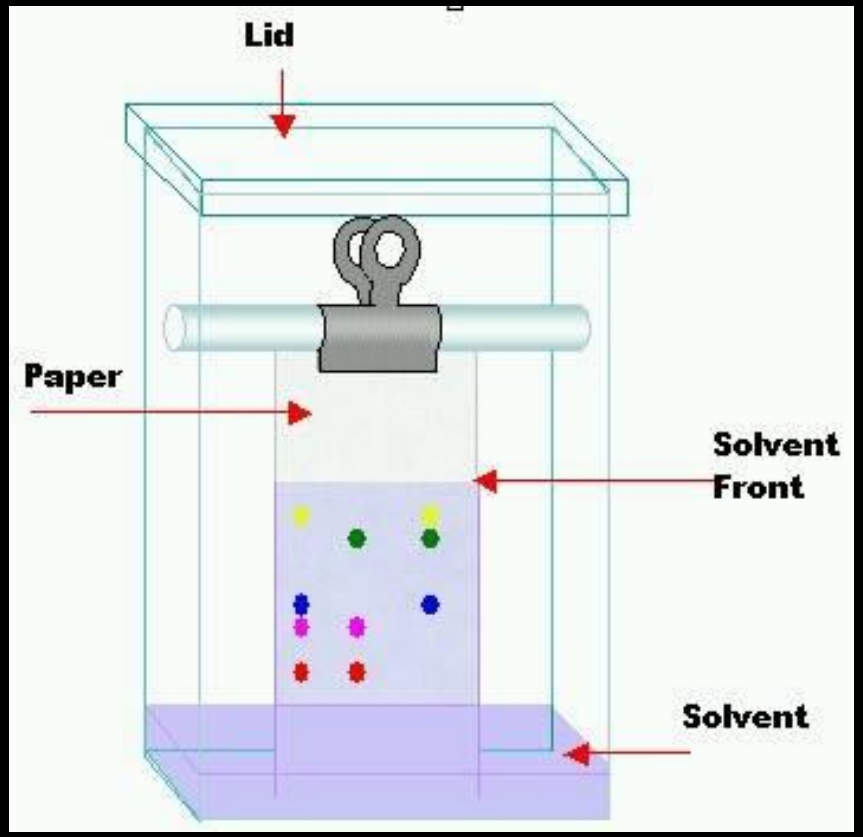
Chromatography



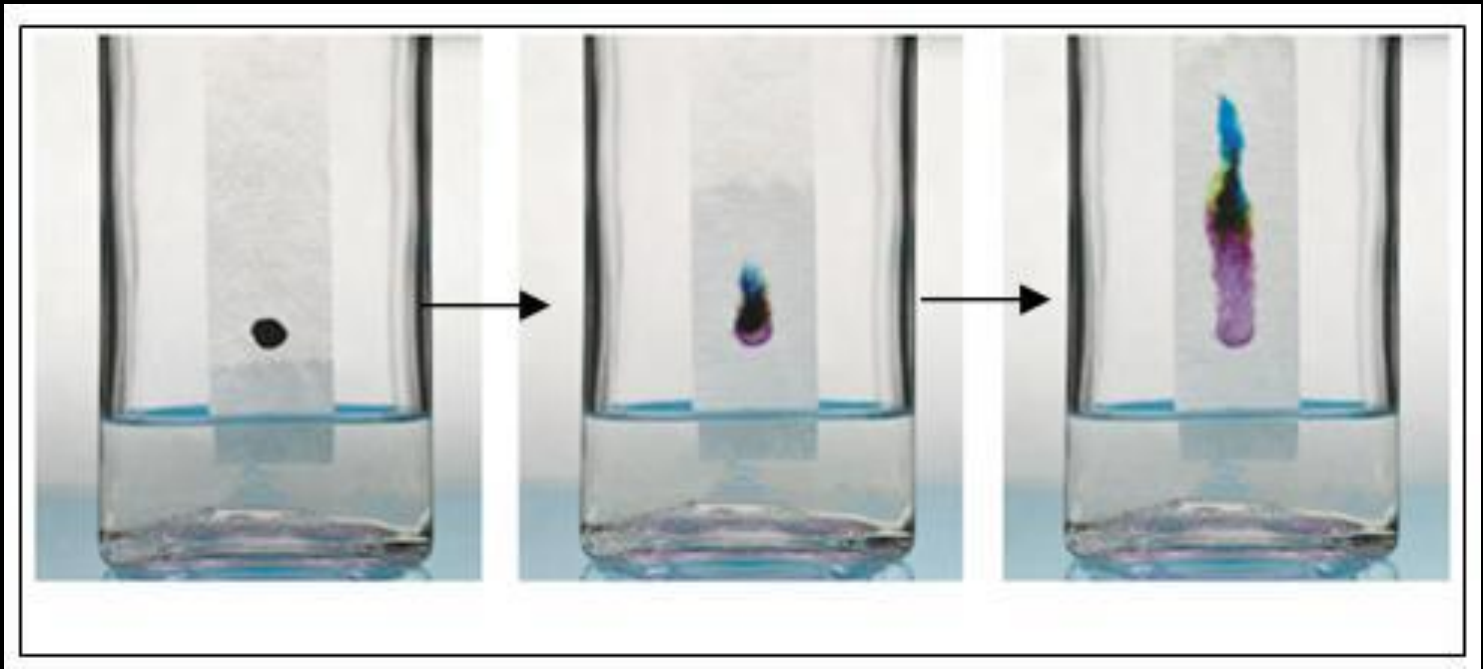
What is Chromatography?



Chromatography is the separation of a mixture by passing it through a medium in which the components move at different rates.

How Does Chromatography Work?

Chromatographic methods are based on a process called adsorption

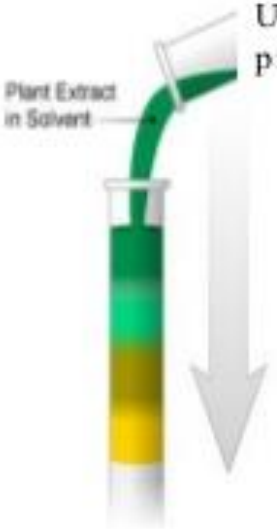


A mixture passes through a solid or liquid material that adsorbs (attracts to its surface) substances.

Examples of Chromatography

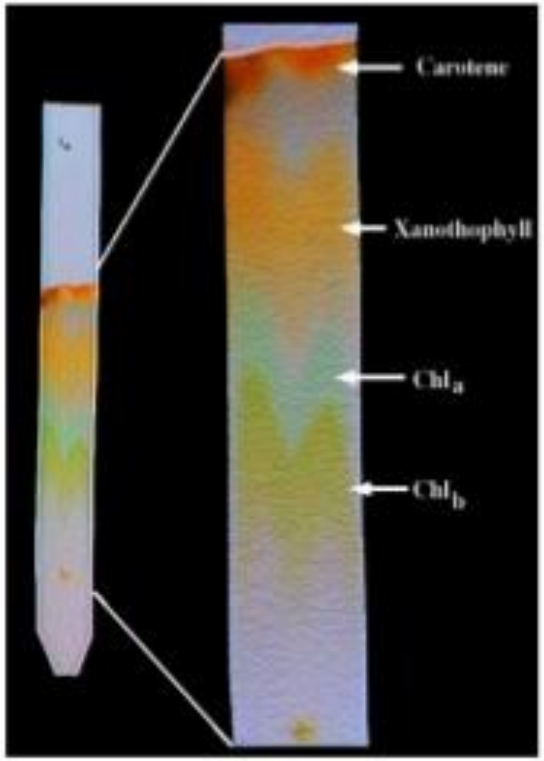
Liquid Chromatography

Used to identify unknown plant pigments & other compounds.



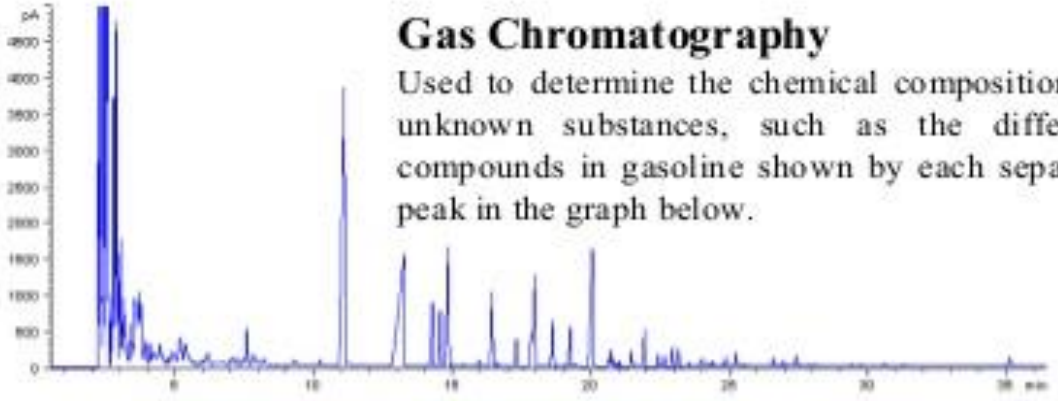
Thin-Layer Chromatography

Uses thin plastic or glass trays to identify the composition of pigments, chemicals, and other unknown substances.



Paper Chromatography

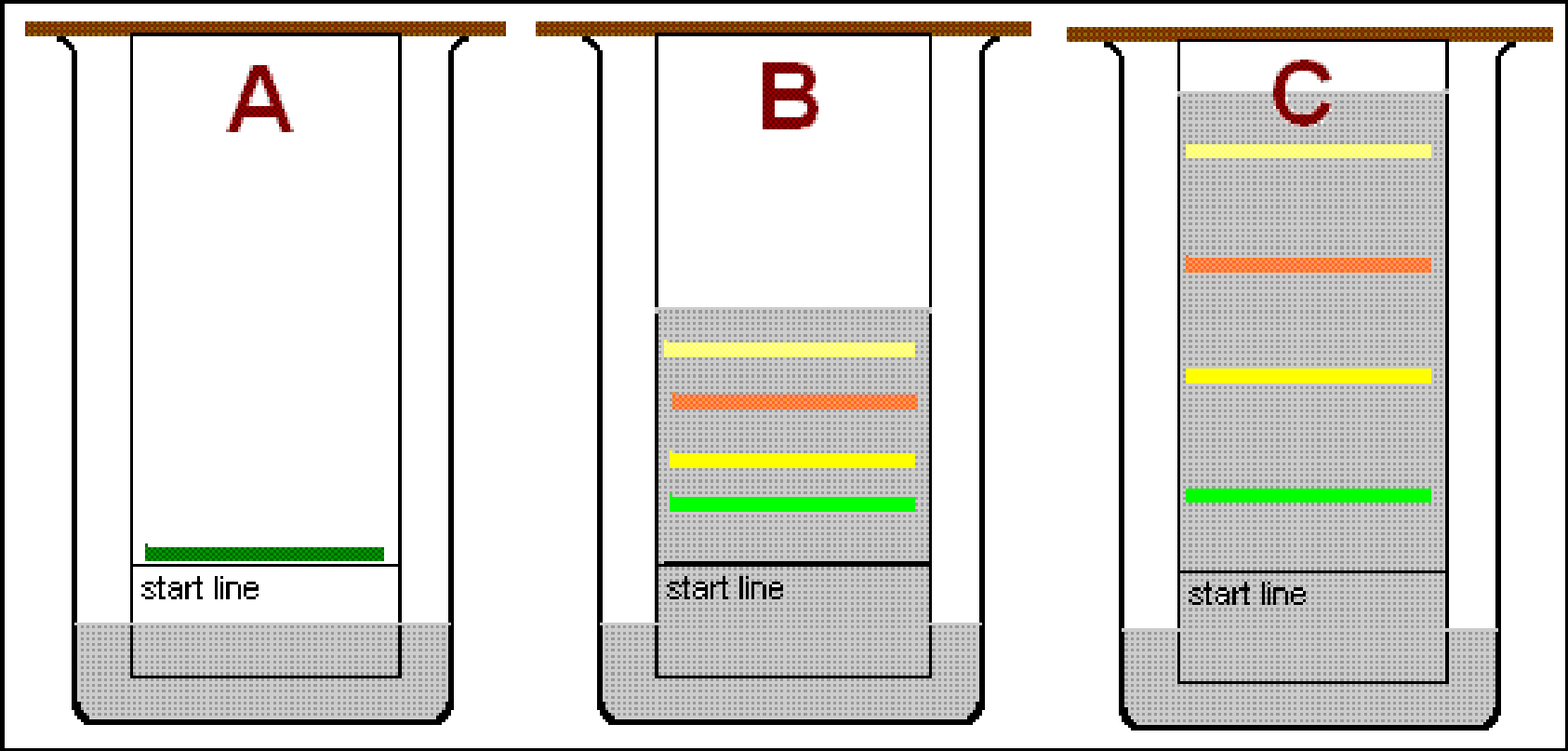
Can be used to separate the components of inks, dyes, plant compounds (chlorophyll), make-up, and many other substances



Gas Chromatography

Used to determine the chemical composition of unknown substances, such as the different compounds in gasoline shown by each separate peak in the graph below.

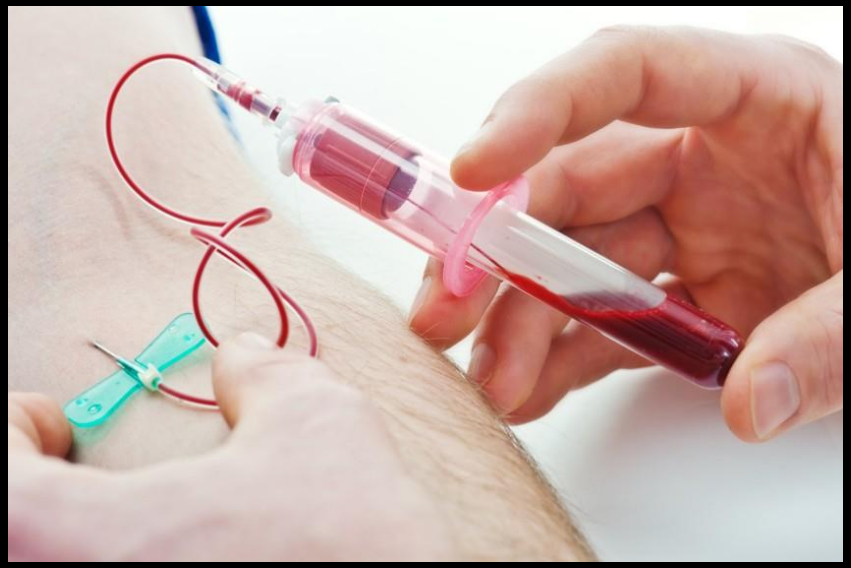
Paper Chromatography



Different molecules have different characteristics such as size and solubility

Real-Life Uses for Chromatography

Pharmaceuticals



Medical Uses

Forensics

YouTube

Chromatography