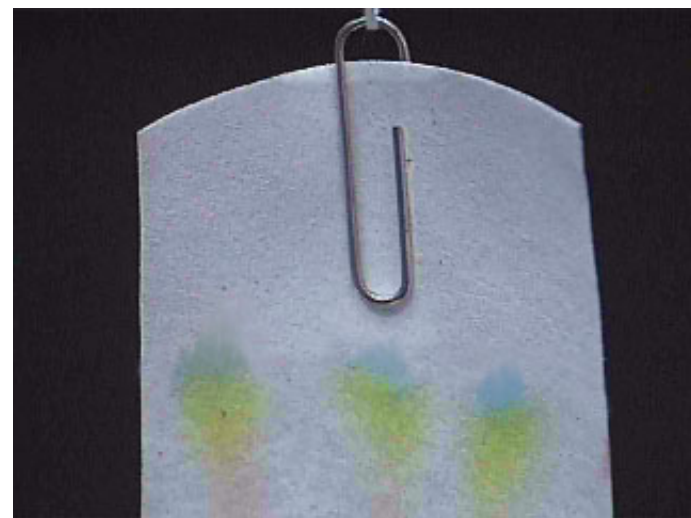


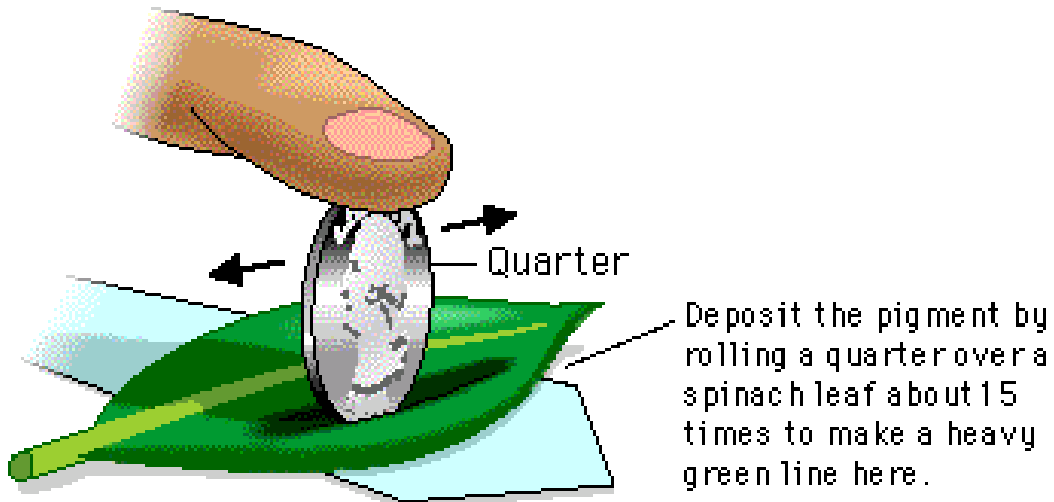
Chromatography Lab

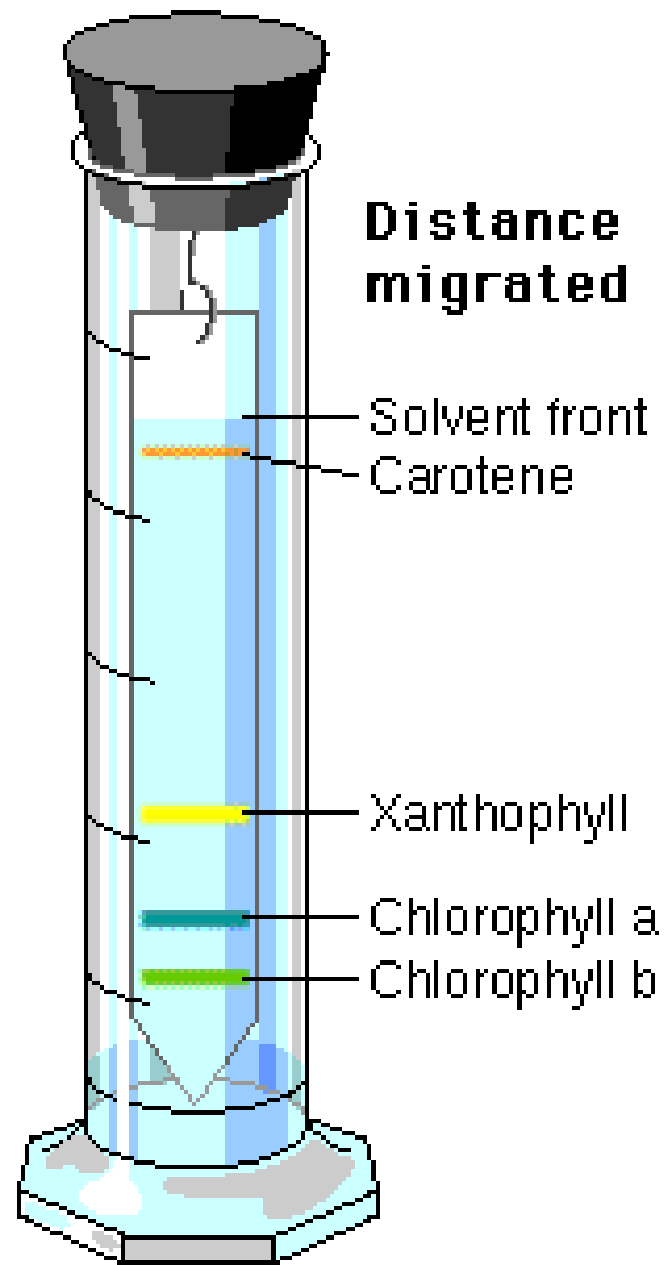
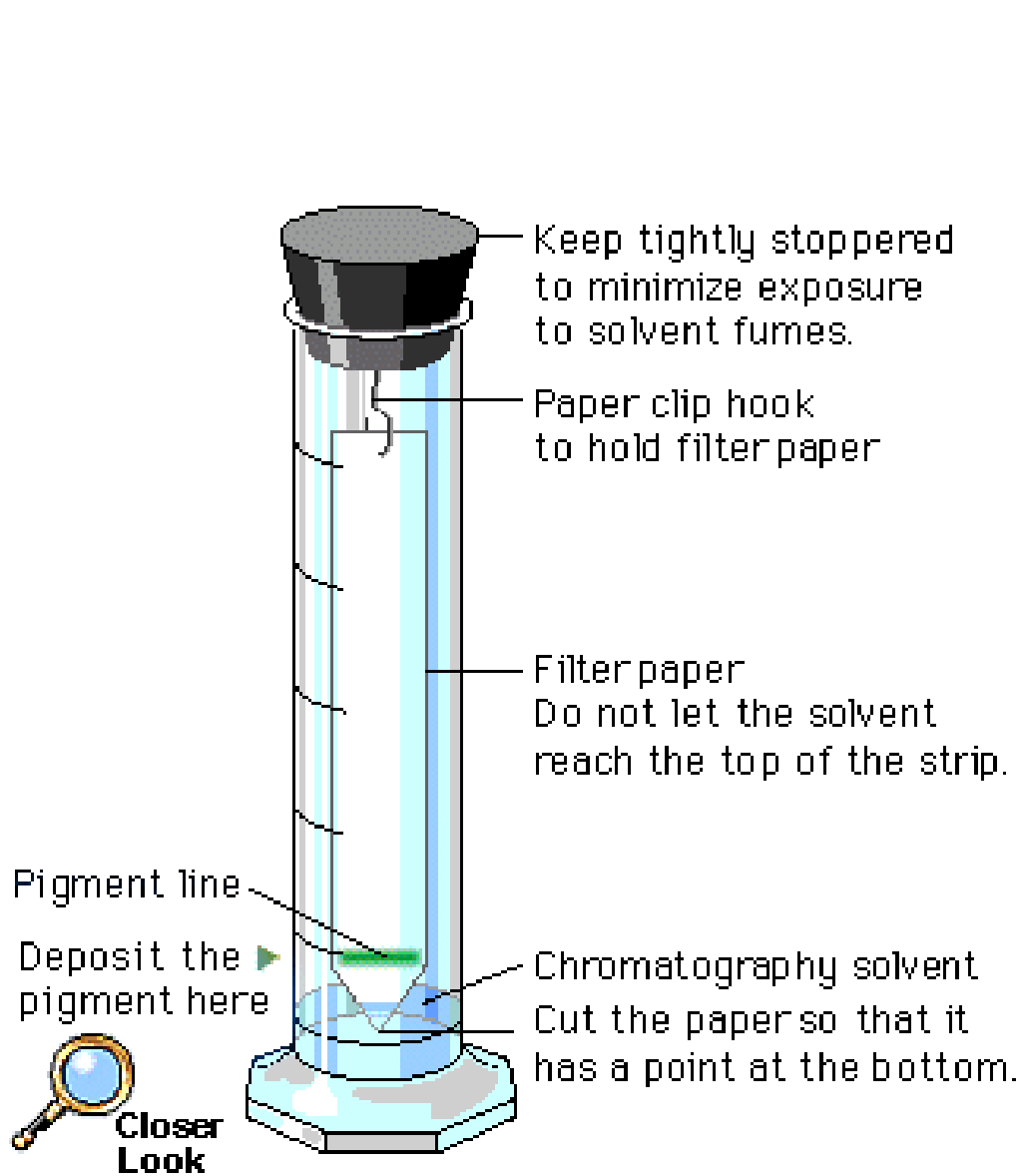
Plant Pigments

- Paper chromatography is a technique used to separate a mixture into its component molecules.
- The molecules migrate, or move up the paper, at different rates because of differences in solubility, molecular mass, and hydrogen bonding (affinity) with the paper.

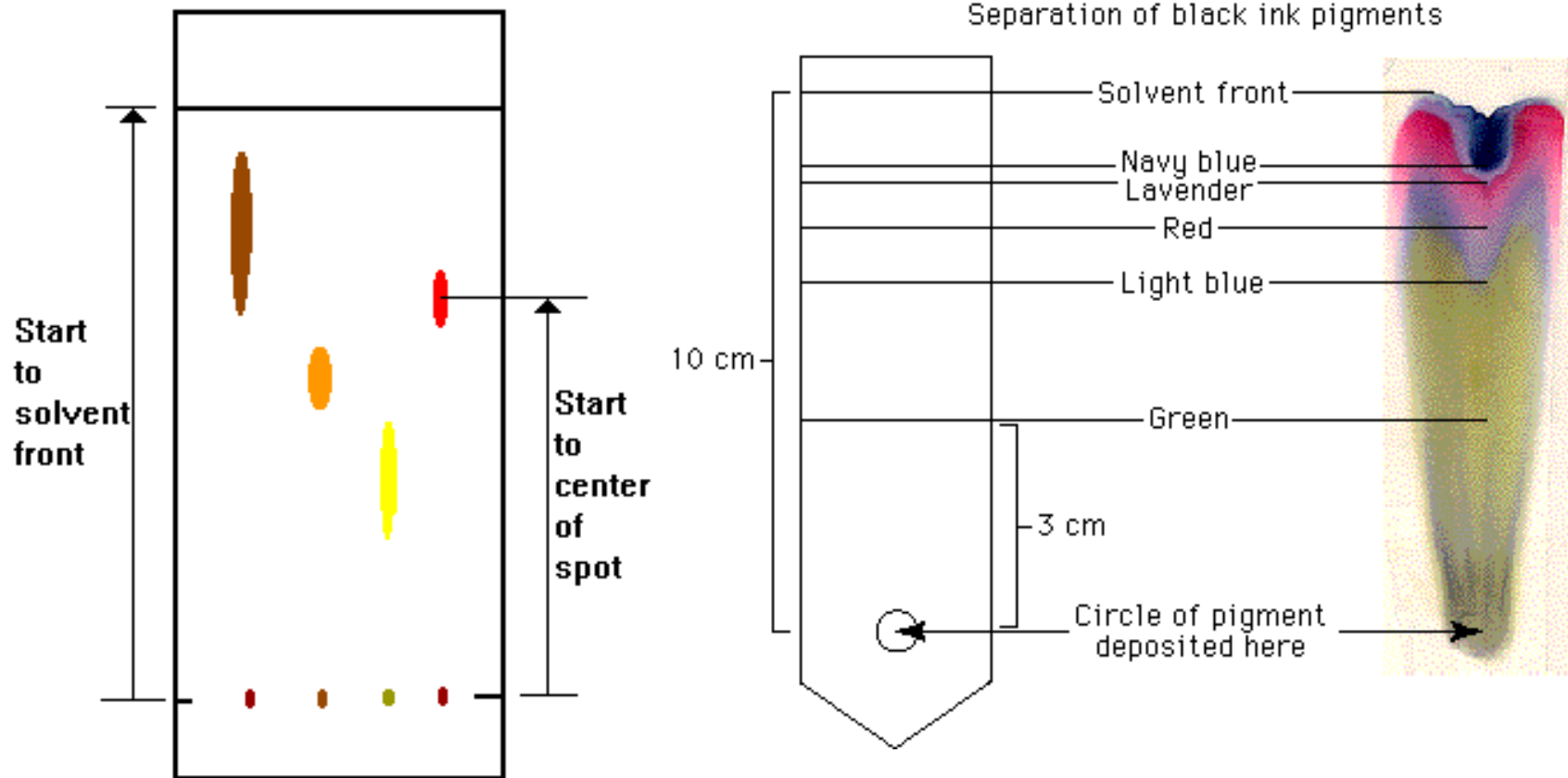


Depositing the Pigment





$$R_f = \frac{\text{Distance from start to center of substance spot}}{\text{Distance from start to solvent front}}$$



Interpreting the Data

- The R_f value for each spot should be calculated.
- R_f stands for "ratio of fronts" and is characteristic for any given compound.
 - known R_f values can be compared to those of unknown substances to aid in their identifications.

$$R_f = \frac{\text{Distance from start to center of substance spot}}{\text{Distance from start to solvent front}}$$

References

- <http://inst.sfcc.edu/chemscape/catofp/chromato/paper/paper.htm>
- <http://www.libraryvideo.com/streaming.asp?sku=N6901>
- http://www.biology.arizona.edu/biochemistry/problem_sets/photosynthesis_1/photosynthesis_1.html