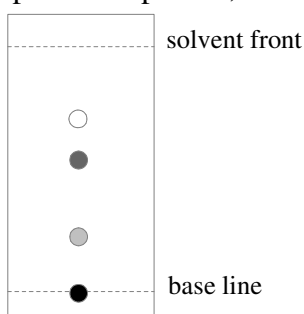
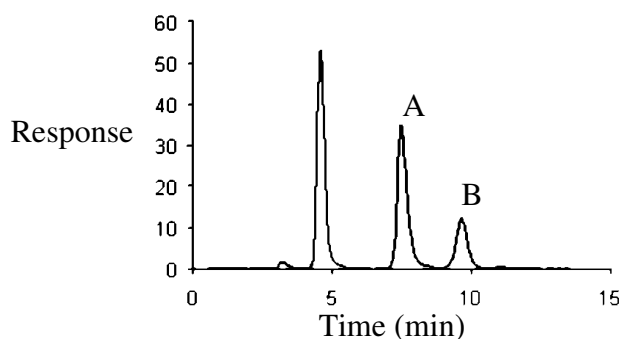


Year 12 Chemistry
Quick Quiz: Analytical Techniques
(and some stuff from before)

1. Calculate the R_f value of the most polar component, if the solvent is polar and the thin film is non-polar.



2. A chromatography is performed using a polar mobile phase and nonpolar stationary phase. The results are shown on the graph below:



State the retention time of component B and state whether it is more or less polar than component A.

3. State briefly why any other 'contaminating' elements in a sample of lead would not interfere with the measured concentration of lead using AAS.
4. Expand the acronym AAS.
- 5.
- (a) Convert 10 ppm to g L^{-1} .
- (b) If it is CH_4 , convert it to mol L^{-1} .
- 6.
- (a) Write the electron configuration for the Mn^{2+} ion.
- (b) Describe how a catalytic converter reduces the quantity of nitrogen oxides emitted.