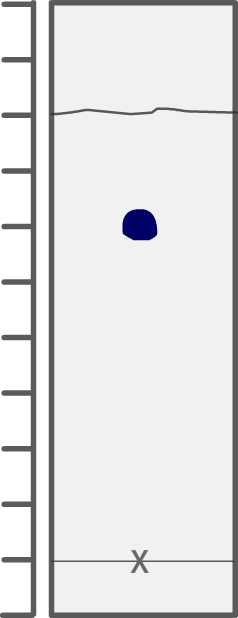
Chapter 8

1. What is a likely source of error in identifying a compound using thin layer chromatography? Choose from: not accurately measuring the volume, the time, mass, distance or density
2. What property is used to separate solutes using thin layer chromatography?
3. Consider the following image, in which the ‘x’ designates where the solute was spotted. What is the Rf value of the solute? Choose from: 0.36, 0.75, 0.70,0.67, 1.20



1. Which of the following atoms would be expected to have the largest radius? Choose from : B, Ne,C,,O Li
2. Which of the following atoms will have no unpaired electrons? Choose from : Br, Be, Si, Na, Al
3. What is the complete ground state electron configuration for oxygen (O)?
4. Which of the following elements would you expect to have the **lowest** first ionization energy? Choose from: He,Ar,Na,Xe,Ne
5. Write a Lewis structure for each molecule or ion. {\rm{N}}_2 {\rm{H}}_2Draw the molecule by placing atoms on the grid and connecting them with bonds. Include all lone pairs of electrons.

N 2 H 2

N 2 H 4

CN –

NO 2 − {\rm CN}^{-}{\rm CN}^{-}