1. a)Define diffusion.
   Diffusion is the movement of molecules from a region of high concentration to a region of low concentration.

   b)Explain the following;
   i) A perfume sprayed by a back-bencher reaches the teacher at the far front of the classroom after some time.
   The particles of the perfume mixed with the particles of the air hence enabling the teacher at the front of the classroom to smell the perfume.

   ii) A crystal of purple potassium permanganate carefully placed at the bottom of water using a thistle funnel in a beaker eventually turns the whole solution pink after some time.
   The particles of the potassium permanganate mix with the particles of the water hence turning the water pink and then purple once the crystal completely dissolves.

2. a) What is surface tension?
   Surface tension is the tendency of a liquid surface to behave like a stretched elastic skin trying to contract.

   b) State any two factors that affect surface tension.
   Temperature
   Impurities

   c) Mention any three observations in which surface tension is applied.
   It is used to reduce the leaking of canvas tents, raincoats and umbrellas.
   It applies in the reduction in the soaking of birds' feathers in water.
   It propels water strider insects on the surface of ponds.