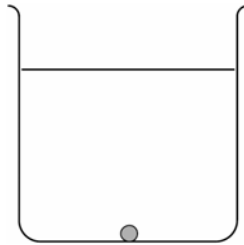


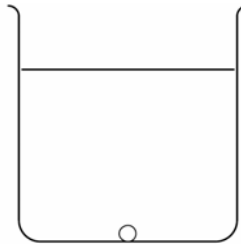
Diffusion

- 1 Jenna put a purple crystal into a beaker of water at 10 o'clock. She came back to look at the beaker at 12 o'clock, and again at 4 o'clock.

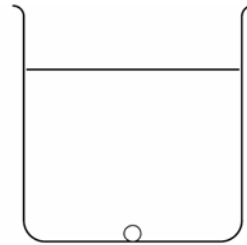
Colour in the beakers to show how far the purple colour would have spread at each time. The first one has been done for you.



10 o'clock



12 o'clock



4 o'clock

- 2 Fill in the gaps in these sentences, using words from the box. You may need to use some words more than once.

The colour in Jenna's beaker spread out by _____ . The water

_____ are moving around all the time. They bump into

_____ from the purple crystal, and _____
them

around. The purple gradually _____ out through the

_____ .

diffusion

move

particles

spreads

water

- 3 Mr Collins has got some new aftershave. Danny can smell it as soon as Mr Collins comes into the lab. Ramesh does not smell it until two minutes later.

a Who is sitting nearest to the lab door?

b Explain your answer

4 Diffusion happens faster in gases than in liquids. Why does this happen? Tick the correct explanation.

- The particles in gases are smaller than the particles in liquids.
- The particles in gases are bigger than the particles in liquids.
- The particles in gases are moving faster than the particles in liquids.
- The particles in gases are moving more slowly than the particles in liquids.