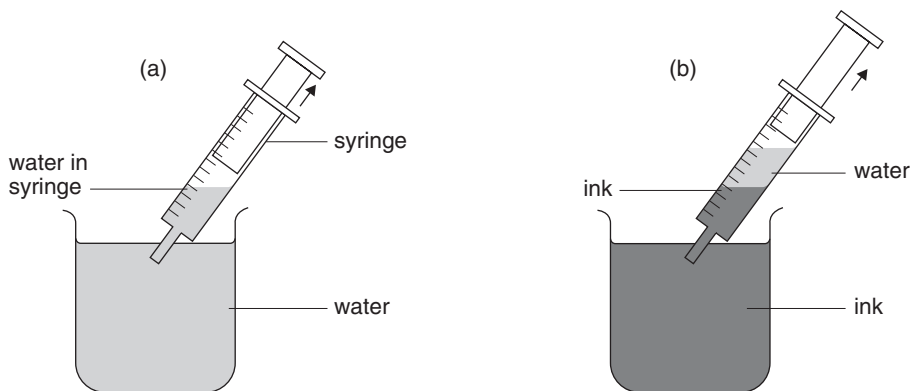




2.6 Always moving and mixing

1 Look at the diagrams and then answer the questions below.



draw some water into the syringe

then carefully draw up a layer of ink so that two separate layers are formed

- What happens to the ink after a few minutes?
 - What happens to the ink after several days?
 - Why is it important to draw the ink in carefully and not move the syringe about?
 - How does the idea that liquids are made of particles explain what happens?
- If a diver gets a cut, a shark may be attracted to it from a long way off. The shark knows the diver is injured even though it cannot see the diver. How does it know this?
 - Use the word list below to complete the passage.

vibrate random compressed gas particles
place volume solid solids can

A _____ is a fixed shape. This is because all the particles stay in the same _____, but they can _____ slightly. The particles in a liquid are in a _____ pattern, but they are still touching each other.

This is why _____ and liquids cannot be _____. The third state of matter is a _____. In this state the _____ are all separated from each other. A gas _____ be compressed. It can be squashed to a smaller _____.

- Copy the passage out, using the words below to fill in the spaces.

melts vapour smell lower water boil 78 °C
alcohol liquids freezes

Often we say that 100 °C is boiling point – this is wrong. Only pure _____ boils at 100 °C; other liquids _____ at other temperatures. Pure alcohol boils at _____, for example. At this temperature _____ turns into a _____. You can _____ the vapour in the room. Water _____ to form ice at 0 °C and ice _____ to form water at 0 °C. Alcohol freezes at a much _____ temperature than water.