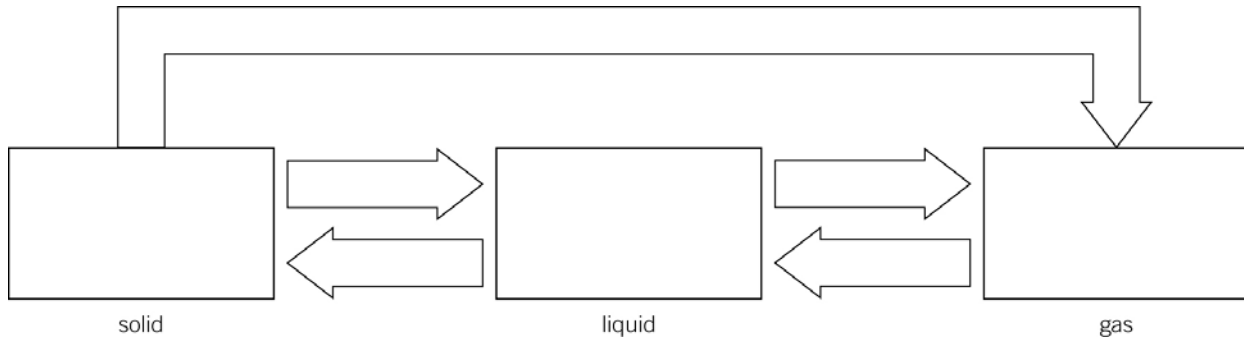


Matter

Step 1:

Draw the particle arrangement for each state of matter in the boxes provided and write in the changes of state that occur in the arrows shown:



Step 2:

For each state, briefly describe how their particles behave (e.g., fixed position, can flow...).

Solid: _____

Liquid: _____

Gas: _____

Step 3:

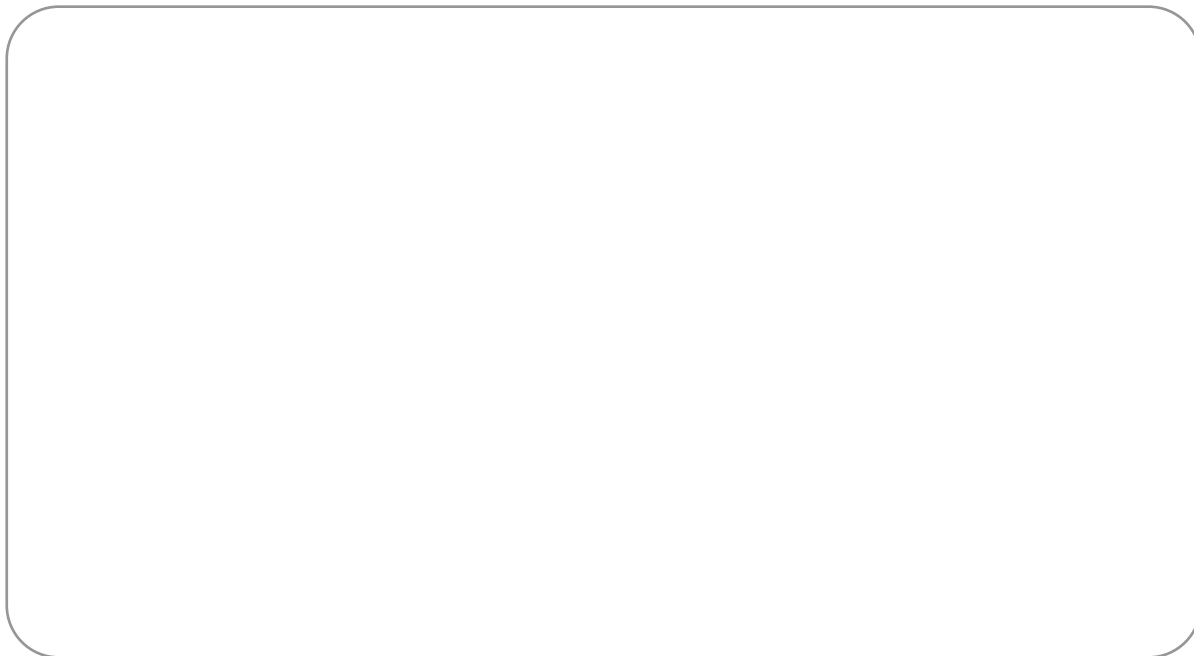
Complete the table below to describe what happens to the particles during each change of state.

Change of state	The particles...
melting	
boiling	

condensing	
freezing	
sublimation	

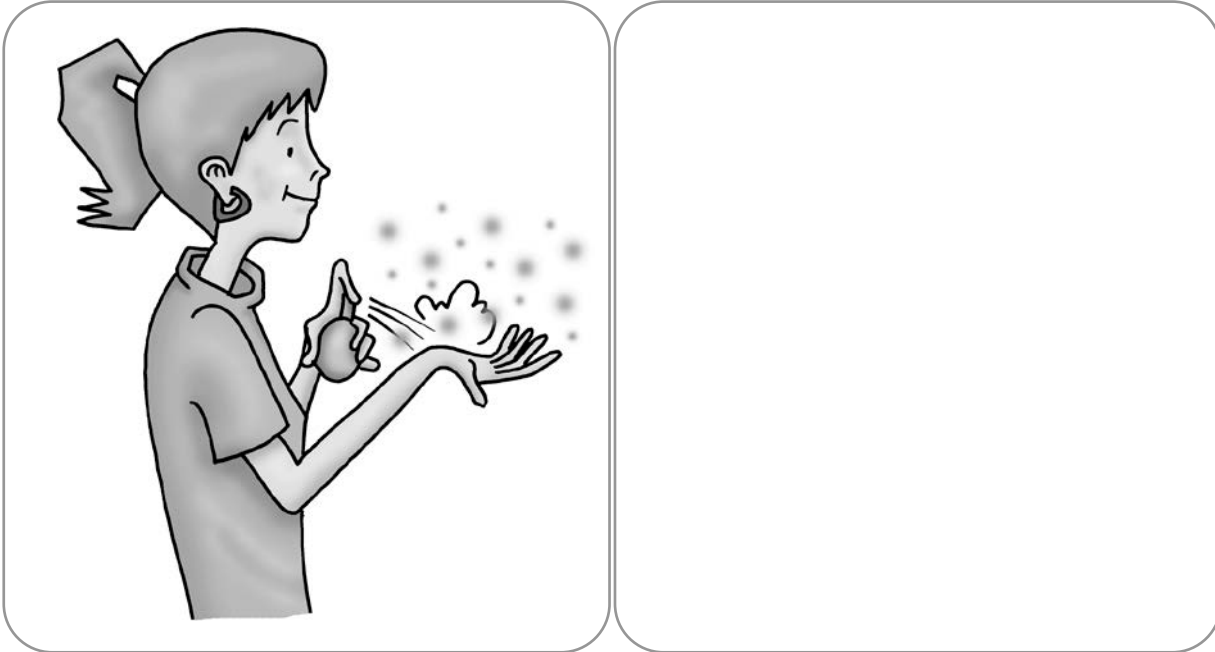
Step 4:

Describe the differences between boiling and evaporation. Use labelled particle diagrams in your answer.



Step 5:

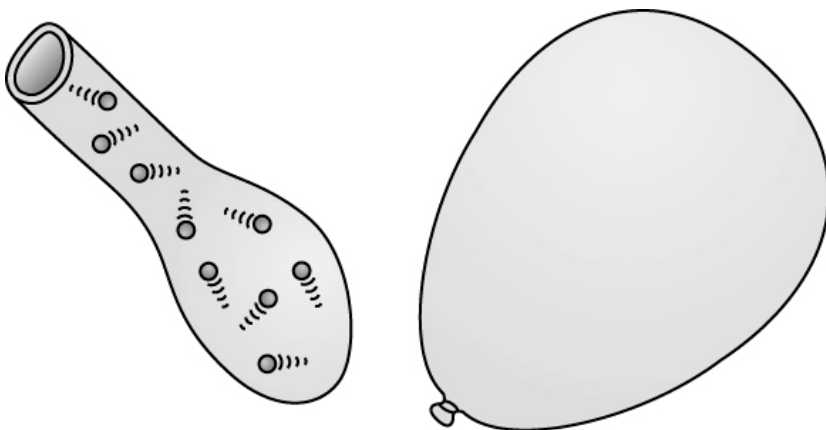
The diagram on the left below shows scented perfume particles. In the box on the right, draw a diagram of what the particles will look like after they have undergone diffusion (spread out through the room).



Step 6:

Gas pressure increases when a balloon is blown up. In the diagram below, the particles are missing from the inflated balloon on the right.

Fill in the missing particles on the diagram.



Step 7:

Fill in the table to say when you would use each separation method.

Try to give an example for each method.

Separation method	Used for...
chromatography	
filtration	
evaporation	
distillation	