

HINTS & TIPS

DIFFUSION

Gases are made up of tiny particles that are constantly colliding and bouncing off each other, rather like shaking a large box that is half filled with ping-pong balls, except that the gas doesn't need shaking.

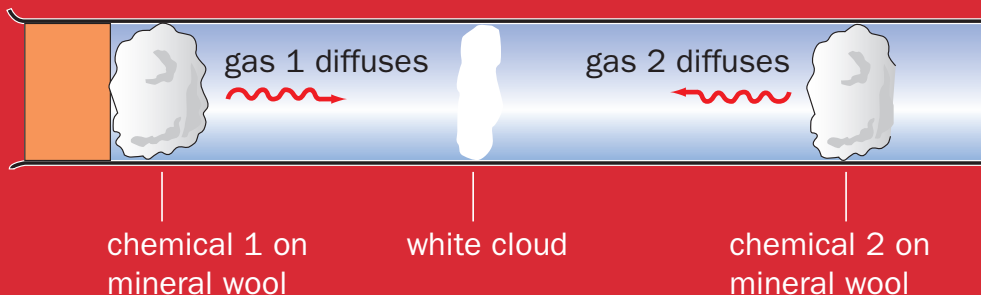
This constant movement means that particles can move around in relation to each other and can get mixed up with other particles. This is called diffusion.

In the experiment shown in the diagram, two wads of cotton wool have had different liquid chemicals tipped onto them. These two chemicals make a white gas cloud when they mix and react with each other.

Both wads are placed in the tube at the same time and the ends of the tube are sealed with bungs to stop drafts moving any gases around.

Shortly after, a white gas cloud is produced in the tube, proving that the gases from the two chemicals have diffused into the air in the tube and then met.

In the diagram, the white gas cloud is closer to one end, rather than in the middle of the tube because the gas on the right has diffused faster and had travelled further than the gas on the left when they mixed.



Rapid

We bring STEAM to life

www.rapidonline.com