

1 Gases and diffusion — Part 2 — Answers

Answers

Work through these after trying the questions yourself.

1.1 The gas particles hitting the walls of the container.

1.2 The particles gain kinetic energy and move faster, so they hit the walls harder and more often; with the volume fixed, this raises the pressure.

1.3 The spreading of particles from a high concentration to a low concentration (by random motion).

1.4 Because the particles in a solid cannot move from place to place (they only vibrate).

1.5 Ammonia travels further, because it is lighter (smaller M_r), so its particles move faster and diffuse more quickly.

1.6 Gas X spreads faster: it has the much smaller M_r (it is far lighter), so its particles move faster and diffuse more quickly.