

2 States of matter – Part 1 —Answers

Answers

Work through these after trying the questions yourself.

2.1 (a) gas \ (b) solid.

2.2 The average kinetic energy of the particles.

2.3 -273°C .

2.4 The fast-moving particles collide with the walls; each collision is a tiny force, and the many collisions per second per unit area make the pressure.

2.5 In a smaller volume the particles hit each unit of wall area more often (more collisions per second), so the pressure is higher.

2.6 Heating gives the particles more kinetic energy, so they move faster. They then strike the walls (1) **harder** (each hit a bigger force) and (2) **more often** each second —both raise the pressure.