

Gases

1. Explain the following in terms of the kinetic model of a gas.

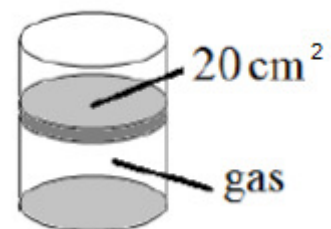
(a) When the volume of a gas is reduced at constant temperature the pressure increases.

(b) When the temperature of a gas is reduced at constant volume the pressure decreases.

(c) When the volume of a gas is suddenly reduced the temperature increases.

2. If the speed of a molecule is 600 ms^{-1} and it travels 10^{-7} m between collisions how many collisions does it make per second?

3. The pressure of a gas is 5 kPa , what force will be exerted on a piston of area 20 cm^2 .



<p><u>Formula</u> $P=F/A$</p>
--

