Kinetic Model of Matter – 2022 June O Level 5054

1. June/2022/Paper_11/No.7

The initial pressure of a volume V_1 of a fixed mass of gas is p_1. The gas expands at a constant temperature until it has volume V_2 and pressure p_2.

Which statement about the pressure and volume of the gas is **not** correct?

A Pressure is measured in N/m^3.

B Pressure multiplied by volume is a constant.

C Pressure is directly proportional to $\frac{1}{\text{volume}}$.

D The ratio of V_1 to V_2 is equal to the ratio of p_2 to p_1.

2. June/2022/Paper_11/No.18

Which row describes the arrangement of particles and the forces between particles in a solid?

	arrangement of particles	forces between particles
A	regular	strong
B	regular	weak
C	irregular	strong
D	irregular	weak

3. June/2022/Paper_12/No.21

Which list shows the states of matter in order of expansion from smallest to greatest for the same temperature rise?

A gas → liquid → solid

B liquid → solid → gas

C solid → gas → liquid

D solid → liquid → gas

4. June/2022/Paper_12/No.22

Which row describes the boiling and the evaporation of a liquid?

	boiling	evaporation
A	bubbles form throughout the liquid	only occurs at one temperature
B	bubbles form throughout the liquid	produces cooling
C	occurs at any temperature	only occurs at one temperature
D	occurs at any temperature	produces cooling

5. June/2022/Paper_12/No.23

A hairdryer is used to blow air across the surface of water in a beaker so that the water evaporates.

What increases the rate of evaporation of the water?

A decreasing the speed of the air from the hairdryer

B decreasing the mass of the water in the beaker

C increasing the surface area of the water by using a wider beaker

D increasing the volume of the water in the beaker