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/m³.
- **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
Α	regular	strong
В	regular	weak
С	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
$$\rightarrow$$
 liquid \rightarrow solid

B liquid
$$\rightarrow$$
 solid \rightarrow gas

$$\mathbf{C}$$
 solid \rightarrow gas \rightarrow liquid

$$D \quad \text{solid} \rightarrow \text{liquid} \rightarrow \text{gas}$$

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4. June/2022/Paper_12/No.22

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

	boiling	evaporation
Α	bubbles form throughout the liquid	only occurs at one temperature
В	bubbles form throughout the liquid	produces cooling
С	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