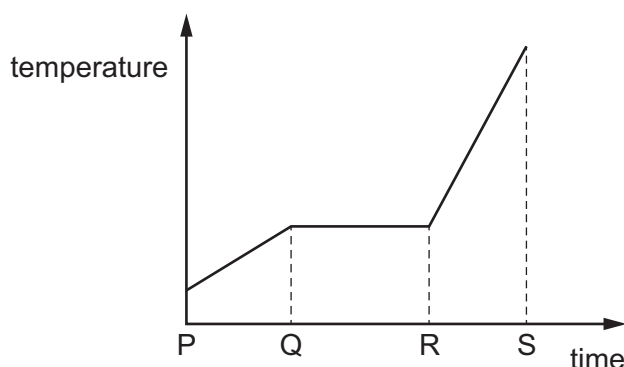


- 18** There is one temperature, about  $0.01^{\circ}\text{C}$ , at which water, water vapour and ice can co-exist in equilibrium.

Which statement about the properties of the molecules at this temperature is correct?

- A** Ice molecules are closer to one another than water molecules.
- B** The mean kinetic energy of water molecules is greater than the mean kinetic energy of ice molecules.
- C** Water vapour molecules are less massive than water molecules.
- D** Water vapour molecules have the same mean speed as both ice and water molecules.

- 19** A crystalline solid is heated at a constant rate and the change of temperature with time is shown in the graph below.



Which statement about the particles in the material is correct?

- A** In the time from P to Q, the particles are arranged randomly.
- B** In the time from Q to R, some particles are arranged regularly and some particles are arranged randomly.
- C** In the time from R to S, the particles are widely spaced.
- D** The arrangement of the particles is the same in the time from P to S.

**Space for working**