18 There is one temperature, about 0.01 °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?

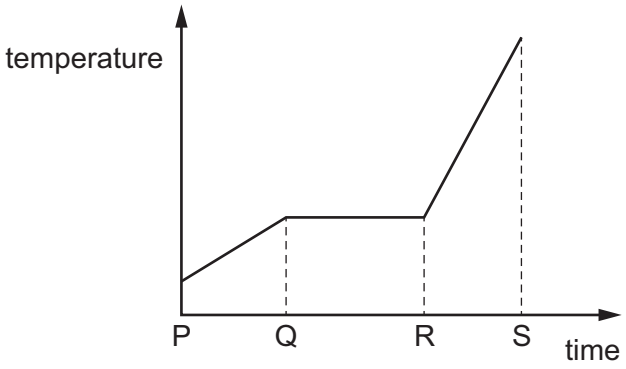
A Ice molecules are closer to one another than water molecules.

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.

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