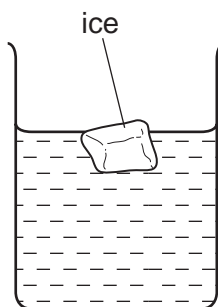


**16** The diagram shows an ice cube floating in water.



Both the ice cube and the water are at  $0^{\circ}\text{C}$ .

Which statement correctly compares the molecular properties of the ice and those of the water?

- A** The mean inter-molecular potential energies are the same for both the ice molecules and the water molecules.
- B** The mean inter-molecular separations are the same for both the ice and the water.
- C** The mean kinetic energies are the same for both the ice molecules and the water molecules.
- D** The mean total energies are the same for both the ice molecules and the water molecules.

**Space for working**