

7 Air is trapped in a glass tube. When the air is forced into a smaller volume at a constant temperature, the pressure increases.

Which of the following statements about air molecules is a reason why the pressure the trapped air exerts on the tube increases?

- ☐ **A** The molecules have a greater mean kinetic energy.
- ☐ **B** The molecules make more frequent collisions with each other.
- ☐ **C** The molecules make more frequent collisions with the walls of the tube.
- ☐ **D** The molecules experience a greater change in momentum when they collide with the tube.

(Total for Question 7 = 1 mark)