

- 12** A balloon contains 2.0 moles of helium gas at a temperature of 27 °C. The molar mass of helium is 4.0 g mol<sup>-1</sup>.

What is the average translational kinetic energy of the helium atoms in the balloon?

- A**  $5.6 \times 10^{-22}$  J      **B**  $6.2 \times 10^{-21}$  J      **C** 30 J      **D** 7500 J