

**15** What is the approximate number of atoms per unit volume of an ideal monatomic gas at a temperature of 30°C and a pressure of  $1.2 \times 10^5$  Pa?

**A**  $1.0 \times 10^{22}$

**B**  $6.0 \times 10^{23}$

**C**  $2.9 \times 10^{25}$

**D**  $2.9 \times 10^{26}$