

- 14** An ideal gas is held in a constant volume container fitted with a valve through which gas can escape.

Starting at 150 K, the temperature of the gas is raised by 900 K while its pressure in the container is raised from P to $2P$. This results in a fraction of the original number of gas molecules escaping through the valve.

What is the pressure in the container after the gas is cooled back to its starting temperature?

- A** $0.29 P$ **B** $0.33 P$ **C** $0.50 P$ **D** P