

- 14** A gas cylinder is fitted with a safety valve which releases a gas when the pressure inside the cylinder reaches 2.0×10^6 Pa.

Given that the maximum mass of ideal gas the cylinder can contain at 300 K is 2.0 kg, what is the mass of gas that escapes from the cylinder if it is heated to 400 K?

- A** 0.50 kg **B** 0.75 kg **C** 1.2 kg **D** 1.5 kg