

- 29** Radon-222 ($^{222}_{86}\text{Ra}$) is a radioactive gas that decays randomly with a decay constant of $7.55 \times 10^{-3} \text{ hour}^{-1}$.

The activity of radon gas in a sample of $4.80 \times 10^{-3} \text{ m}^3$ of air taken from a building is 0.600 Bq.

Find the number of radon atoms in 1.00 m^3 of the air.

- A** 125
- B** 1.66×10^4
- C** 2.86×10^5
- D** 5.96×10^7