

- 30** Hydrogen bombs operate with tritium, a radioactive isotope of hydrogen with a half-life of 1.7×10^8 s.

It has been proposed that if the production of tritium were halted, countries storing hydrogen bombs would have to replenish supplies from existing bombs. Eventually there would not be enough tritium to make any bombs.

A country has a stockpile of 500 hydrogen bombs.

After how many years would it be unable to make a single bomb?

- A** 1.5×10^9 years **B** 6.80×10^5 years **C** 78 years **D** 48 years

END OF PAPER