

**26** Atom X is an isotope of element E.

What is essential for another atom, Y, to also be an isotope of element E?

- A** It must be ionised.
- B** It must be radioactive.
- C** It must have the same number of nucleons as X.
- D** It must have the same number of protons as X.

**27** Which observation of the Rutherford  $\alpha$ -particle scattering experiment led to the conclusion that an