

38 A nucleus X decays into a nucleus Y by emitting an alpha particle followed by two beta particles.

Which statement about this nuclear decay is correct?

- A** Beta particle decay occurs when a proton changes into a neutron.
- B** Nucleus Y has the same nucleon number as nucleus X.
- C** Nucleus Y is an isotope of nucleus X.
- D** The total mass of the products is equal to the mass of the initial nucleus X.

Space for working