

39 A nucleus X is radioactive and decays into a nucleus Y.

X and Y are isotopes of the same element.

Which combination of particles could have been emitted during the decay process?

- A 1 α -particle and 1 β^- particle
- B 1 α -particle and 2 β^- particles
- C 2 α -particles and 1 β^- particle
- D 2 α -particles and 2 β^- particles

40 A radioactive isotope of a metal has a half-life of