

39 In a nuclear physics experiment, a nucleus of $^{32}_{16}\text{S}$ collides with a nucleus of $^{94}_{42}\text{Mo}$. The nuclei combine together and immediately emit a single alpha-particle.

The nuclear reaction is shown.



What is nucleus X?

A $^{122}_{56}\text{X}$

B $^{124}_{54}\text{X}$

C $^{126}_{58}\text{X}$

D $^{126}_{59}\text{X}$