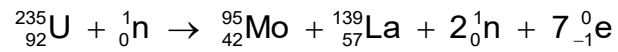


- 29** One nuclear reaction that can take place in a nuclear reactor may be represented by the equation



Data for a nucleus and some particles are given in the table.

nucleus or particle	mass / u
${}_{57}^{139}\text{La}$ nucleus	138.955
${}_0^1\text{n}$ particle	1.00863
${}_1^1\text{p}$ particle	1.00728
${}_ -1^0\text{e}$ particle	5.49×10^{-4}

What is the binding energy per nucleon of lanthanum-139 (${}_{57}^{139}\text{La}$)?

- A** 7.84 Mev **B** 7.87 MeV **C** 19.13 MeV **D** 19.19 MeV