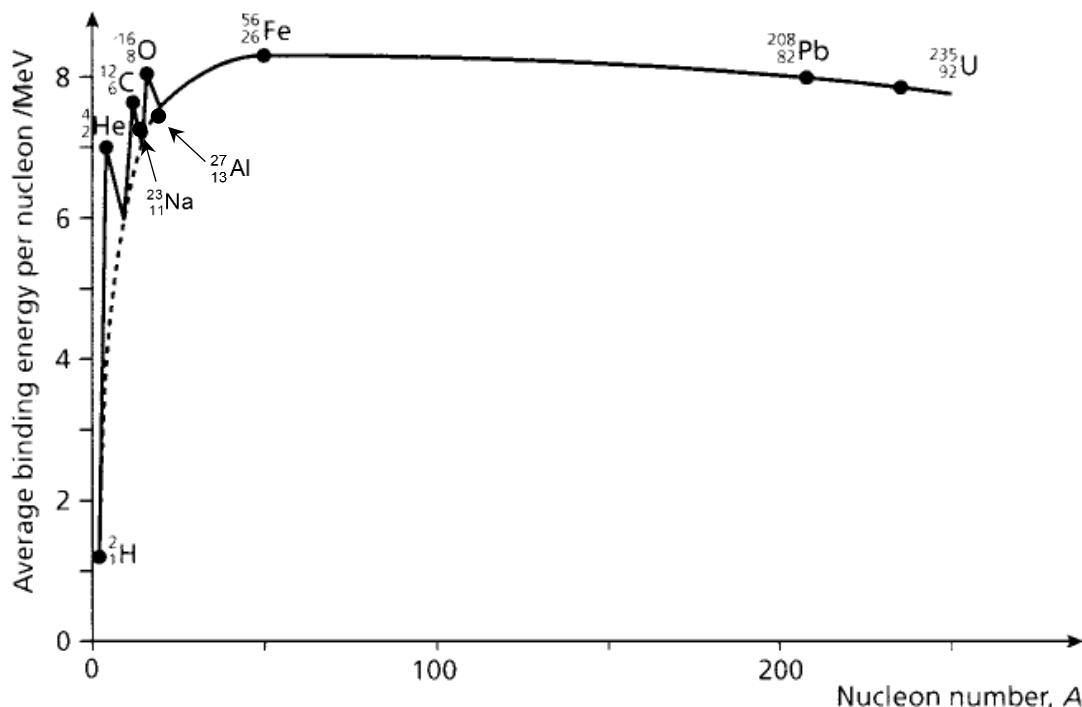


- 30 The diagram shows a graph of the binding energy per nucleon for a number of naturally occurring nuclides plotted against their nucleon number.



Which of the following statements is a correct deduction from the graph?

- A Of the nucleus plotted, ^1_1H is the most stable.
- B $^{27}_{13}\text{Al}$ will not spontaneously emit an alpha particle to become $^{23}_{11}\text{Na}$.
- C Energy will be released if a nucleus with a nucleon number greater than about 56 undergoes fusion with any other nucleus.
- D Energy will be released if a nucleus with a nucleon number less than about 56 undergoes fission as a result of particle bombardment.

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