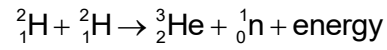30 Two deuterium nuclei fuse together to form a Helium-3 nucleus, with the release of a neutron. The reaction is represented by

$$_1^2H + {}_1^2H \rightarrow {}_2^3He + {}_0^1n + energy$$

The binding energies per nucleon are:

for $_1^2H$ 1.09 MeV,

for $_2^3He$ 2.54 MeV.

How much energy is released in this reaction?

A 0.36 MeV **B** 1.45 MeV **C** 3.26 MeV **D** 5.44 MeV

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