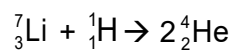


30 Consider the following nuclear reaction:



The masses of the nuclei are as follow: ${}^7_3\text{Li}$: $7.018u$, ${}^1_1\text{H}$: $1.008u$, ${}^4_2\text{He}$: $4.004u$.

How much energy is released when 1.0 g of ${}^1_1\text{H}$ is fused with a sufficient amount of ${}^7_3\text{Li}$?

- A** $2.7 \times 10^{-12} \text{ J}$ **B** $6.1 \times 10^{-10} \text{ J}$ **C** $1.6 \times 10^{12} \text{ J}$ **D** $3.6 \times 10^{14} \text{ J}$