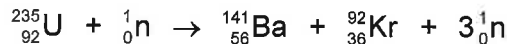


29 One of the reactions that can take place in a nuclear reactor is given by the equation shown.



The table shows data about the nuclei and the particle.

nucleus or particle	mass / u
U-235	235.044
Ba-141	140.914
Kr-92	91.926
${}_0^1\text{n}$	1.00863

How much energy is released when one nucleus of uranium-235 undergoes this reaction?

- A**  $2.79 \times 10^{-11} \text{ J}$    **B**  $3.29 \times 10^{-10} \text{ J}$    **C**  $1.68 \times 10^{16} \text{ J}$    **D**  $1.98 \times 10^{17} \text{ J}$

