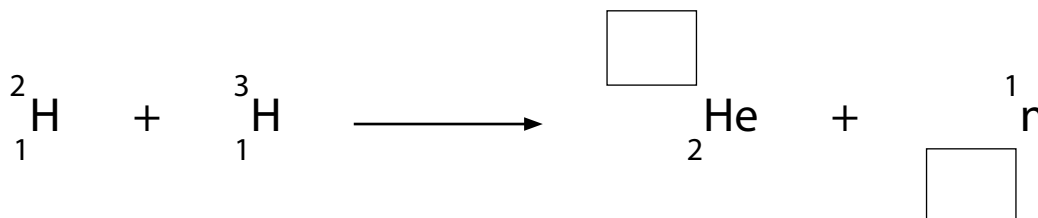


9 This is a question about nuclear energy.

(a) Nuclear fusion can take place between different isotopes of hydrogen to produce an isotope of helium.

(i) Complete the nuclear equation for this process.

(2)



(ii) This process also results in the release of energy.

State where the fusion process takes place naturally.

(1)

(iii) Explain why the isotopes of hydrogen must be heated to a very high temperature for fusion to take place.

(3)

(b) Nuclear fission also results in a release of energy.

Explain how nuclear fission differs from nuclear fusion.

(2)

(Total for Question 9 = 8 marks)

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