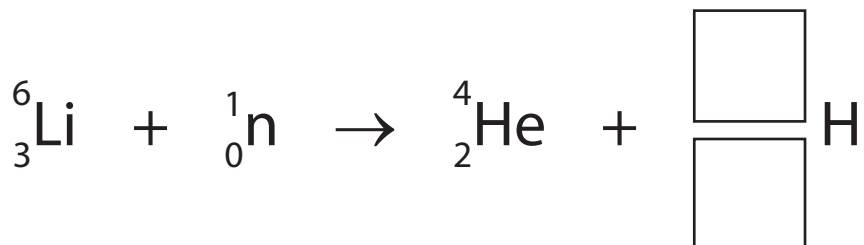


4 In extreme conditions, the isotope lithium-6 can be made to undergo nuclear fission.

- (a) The lithium-6 nucleus absorbs a neutron and produces an alpha particle and an isotope of hydrogen.

The incomplete nuclear equation for this fission is



- (i) Complete the nuclear equation by writing the numbers in the boxes.

(2)

- (ii) Explain why this fission does not cause a chain reaction.

(2)

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- (b) Explain the difference between nuclear fission and nuclear fusion.

(2)

(Total for Question 4 = 6 marks)

