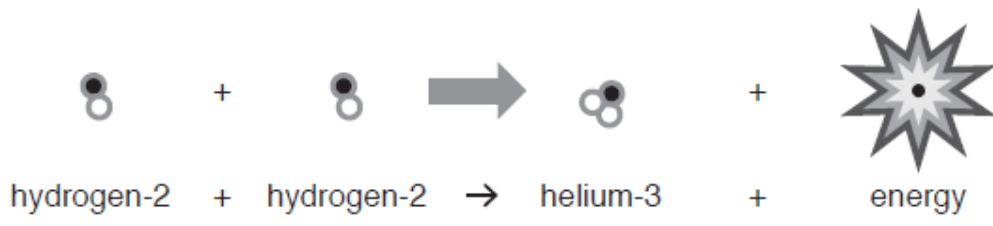


GCSE Physics A (Gateway)

J249/04 Physics A P5-P8 and P9 (Higher Tier)

Question Set 9

1 (a) Nuclear **fusion** is a reaction that happens in stars. This equation for fusion is incomplete.



(i) What else is produced in this reaction? [1]

(ii) Stars are formed from dust and gas.
 What causes the dust and gas to undergo fusion? [1]

(b) (i) Describe one **similarity** between nuclear fission and nuclear fusion. [1]

(ii) Describe one **difference** between nuclear fission and nuclear fusion. [1]

(i) Nuclear fission can be used as a power source to produce electricity.
 Give one **advantage** and one **disadvantage** of using nuclear power to produce electricity.
 advantage
 disadvantage [2]

Total Marks for Question Set 9: 6

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