

6 This passage is from a web page.

Our nearest star, the Sun

The pie chart shows the proportions of chemical elements in the Sun.

Chemical Element	Proportion
Hydrogen	75%
Helium	23%
Other elements	2%

Most of the Sun's helium has been produced from the Sun's hydrogen by the process of nuclear fusion. This process also produces vast quantities of energy. The process takes place in the core of the Sun at a temperature of about 15 million °C and has been going on for about 4.5 billion years. During this period of time, the Sun has remained stable and scientists think that it will remain stable for several billion years into the future.

6 (a) Explain why the Sun remains stable.

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(3 marks)

6 (b) A scientific opinion is expressed on this web page.

Identify this opinion and suggest how scientists could justify it.

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(2 marks)

Turn over for the next question

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Turn over ►

