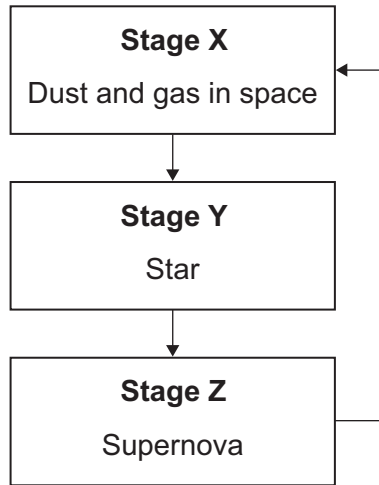


8 The flowchart shows a simple version of the life cycle of a star that is much more massive than the Sun.



8 (a) What causes the change from **Stage X** to **Stage Y**?

.....
(1 mark)

8 (b) For most of its time in **Stage Y**, the star is stable.

Explain why the star remains stable.

.....
.....
.....
.....
(2 marks)

8 (c) (i) Explain how a star is able to produce energy in **Stage Y**.

.....
.....
.....
.....
(2 marks)



8 (c) (ii) Why is a star in **Stage Y** able to give out energy for millions of years?

.....
.....
(1 mark)

8 (d) What happens to the elements produced in a supernova?

.....
.....
(1 mark)

7

END OF QUESTIONS

