

Life cycle of a star

1 Complete the following sentences with the missing words. (6 marks, ★★★)

When a star is a main-sequence star, this means the inward force of
 is balanced with the outward radiation pressure caused by
 This state of can last for millions to billions of years depending
 on the star's When a star similar in size to our own runs out of
 it grows in size and becomes a

red giant	equilibrium	hydrogen	fusion	neutron
stable	mass	supernova	white dwarf	gravity

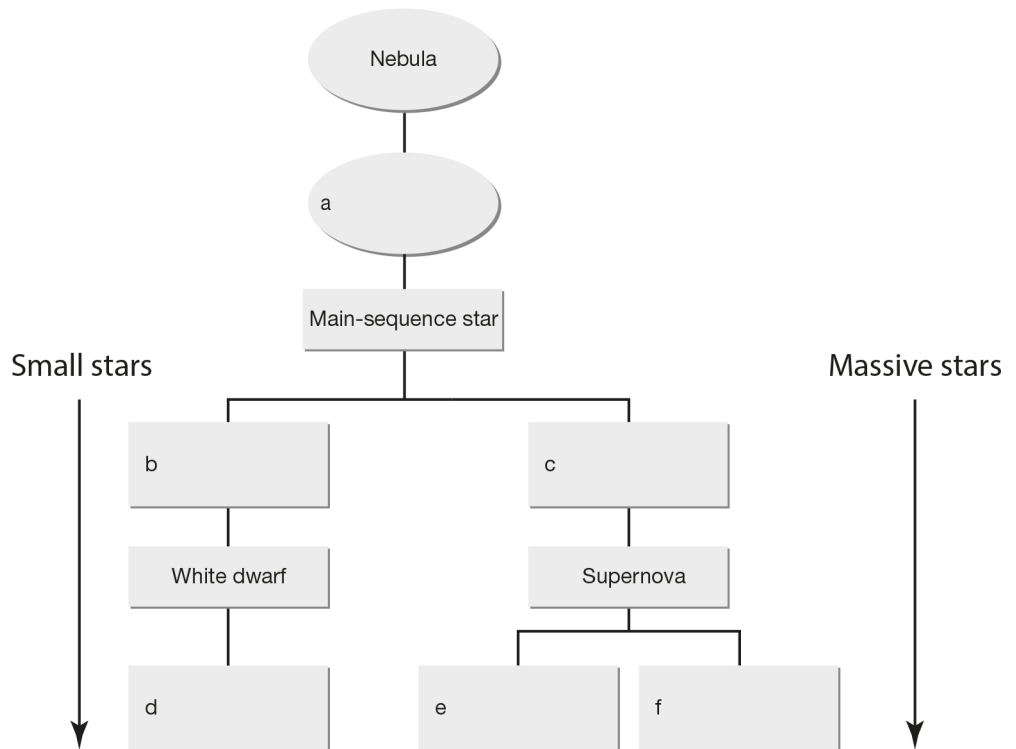
2 The following flow chart is a summary of the life cycle of stars. Complete the missing labels a-f in the flow chart. (6 marks, ★★★)

NAIL IT!

There are three main paths of the life cycle of a star you need to learn:

- 1 Stars of a similar size to our Sun
- 2 Stars bigger than our Sun
- 3 Stars much bigger than our Sun

The beginning of each cycle is the same but the fate of the star is different in each of the three paths.



3 The universe contains an abundance of elements. Explain which stages of the life cycle of stars have made this possible. (6 marks, ★★★)

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DO IT!

Practise drawing flow charts or spider diagrams of the life cycle of stars.