

Think and learn

1 Read and complete the sentences.

characters planets constellations burn the Sun solar system gas billion millions galaxy

Stars are big, burning balls of (1) gas, which are bigger than (2) _____.

They take (3) _____ of years to (4) _____ all the gas inside them.

The closest star to Earth is (5) _____. It is also at the centre of our (6) _____.

A group of stars is called a (7) _____. Ours is called the Milky Way, and it has more

than 100 (8) _____ stars in it. It also has many different (9) _____

these are smaller groups of stars that make particular shapes. They are often named after

(10) _____ from stories.

2 Can you remember? Number the stages of a star's life in the correct order.

A star is created.

We can't see it any more.

A star burns all the gas inside it.

There is a big, cold cloud of gas called a star factory. **1**

Clouds break up and get very hot.

3 Read and complete the information about stars. Number them in order of temperature (1 = the hottest).

We know what stars are made of and how they are made, but did you know that there are different coloured stars? The biggest, hottest stars are blue, like Rigel – the brightest star in the Orion constellation. Scientists think its surface temperature is around 12,000 degrees Celsius (°C). At the other end of the scale, red stars are the coolest (yes, really!), but they are still very hot. For example, Betelgeuse is around 3,200 °C. Between red stars and blue stars are yellow stars, like the Sun, with a temperature of around 5,500 °C.

a 

Colour: yellow
Example: the Sun
Temperature: 5,500 °C

b 

Colour: blue
Example: Rigel
Temperature: 12,000 °C

c 

Colour: red
Example: Betelgeuse
Temperature: 3,200 °C