

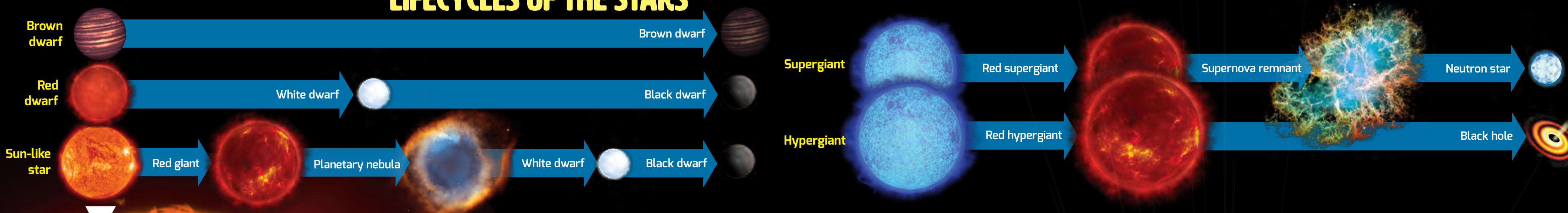
LITTLE POSTER OF

STAR STUFF

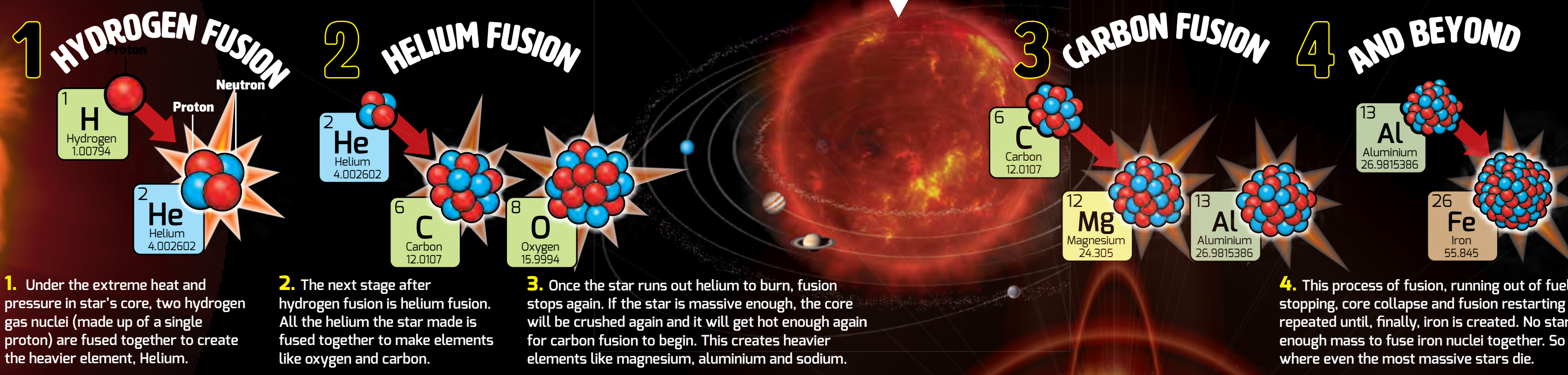
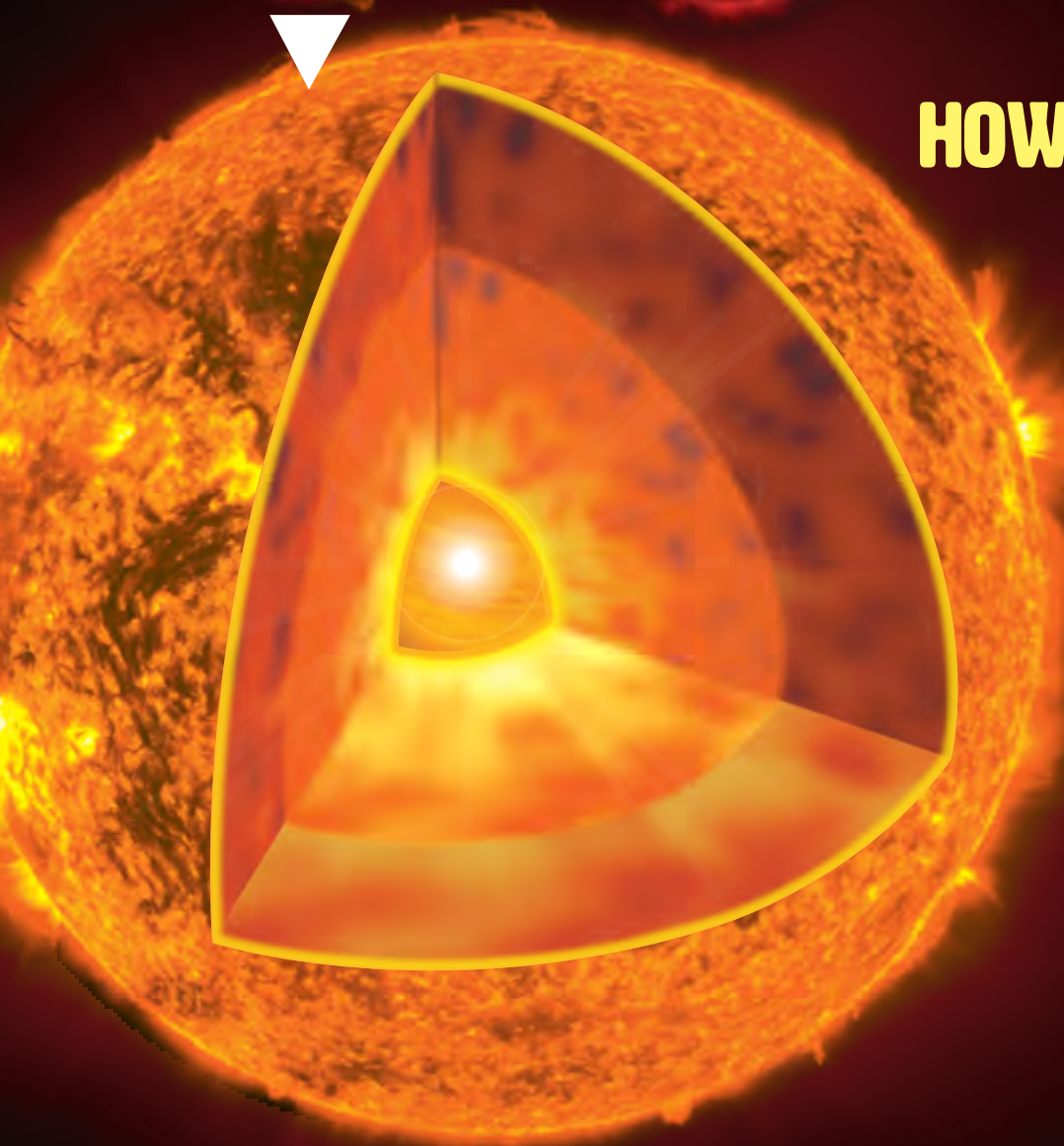
They say that we are 'made of star stuff' and that is literally true. This is because most of the chemical elements that make up you and me and the world around us were actually cooked up in the cores of stars. These nuclear furnaces took the hydrogen gas created in the Big Bang and fused the atoms together to create increasingly heavy chemical elements.

Some stars, like brown dwarves, never get hot enough for fusion to take place. Stars the size of our Sun can continue fusion to elements as heavy as carbon (the elements that form the basis of life on Earth), but it takes truly massive stars, like supergiants or hypergiants to cook up the heaviest chemical elements.

LIFECYCLES OF THE STARS

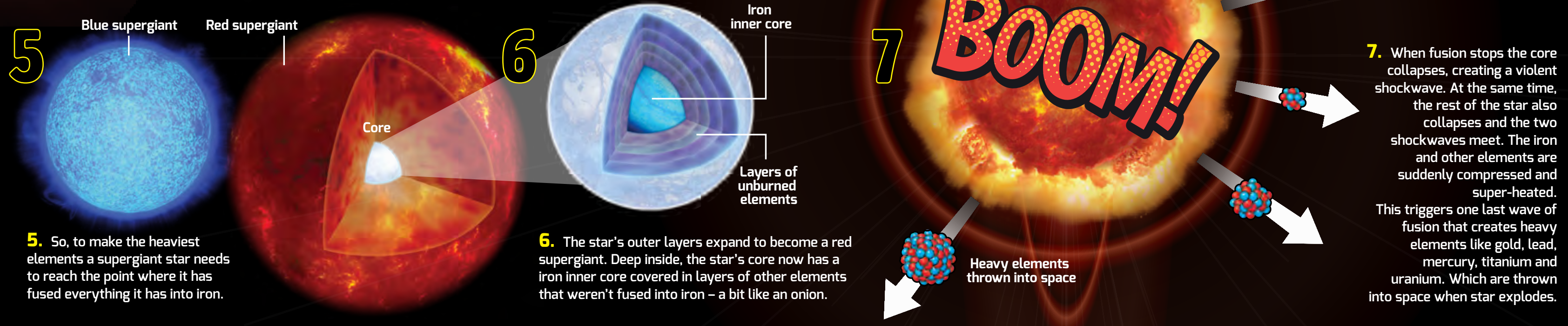


HOW STARS COOK UP THE ELEMENTS



HOW SUPERNOVA MAKE THE REALLY HEAVY STUFF

So, if all the chemical elements are made in stars, and no star can make anything heavier than iron, where did all the elements heavier than iron come from? Well, to make them you need a star to explode as a supernova!



A star's colour is determined by how hot it is - really hot stars are blue, whereas cooler stars are yellow or even red. The spectrum of light emitted by a star can give us a lot of information about the star. Astronomers use seven main classifications for stars based on their colour spectrum.

Colour	Class	Temperature	Colour	Class	Temperature
Blue	O	over 30,000 °C	Yellow	G	5,300 °C
Blue	B	20,000 °C	Orange	K	4,000 °C
Light blue	A	8,500 °C	Red	M	3,000 °C
White	F	6,500 °C			

The Sun is a yellow G-class star