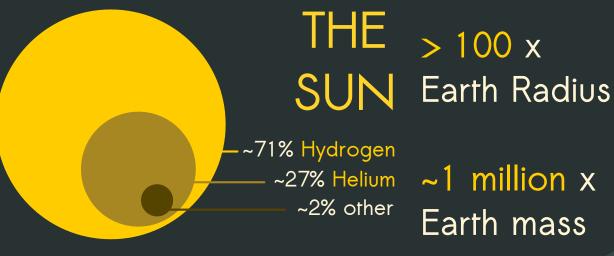


A ball of fire supported by the balance between gravity and fusion



There are between 100 and 400 billion stars in our galaxy.

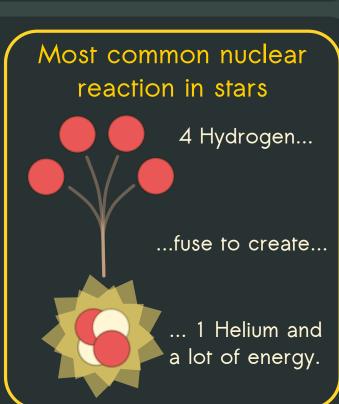


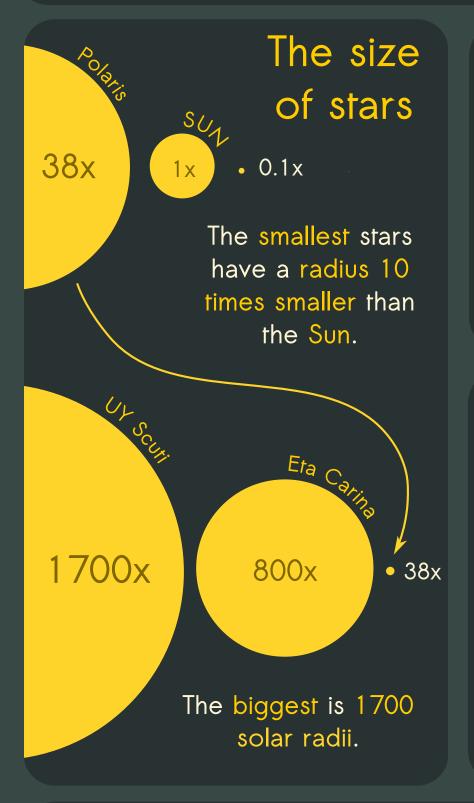
Stars are powered by nuclear fusion

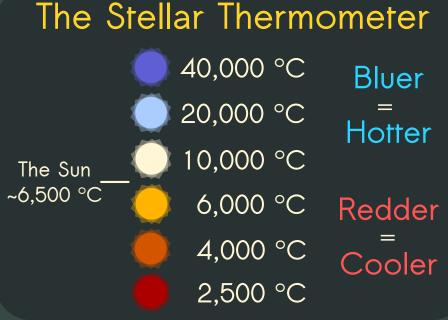
It makes them shine and stops them from collapsing under their own weight.

It creates new elements that where not made during the Big Bang and realeases energy.

Stars are the factories of the Universe.







The heavier the star the shorter the life.

R136a1 is 315 solar masses Lifetime: ~3 million years

The Sun
Lifetime: ~10 billion years

Lower limit: 0.08 solar masses

Lifetime: Trillions of years

Stars die when nuclear fusion stops for good

> 8 solar masses







Supernova explosion

< 8 solar masses





White Dwarf