

WHAT'S A...

# WHITE DWARF?

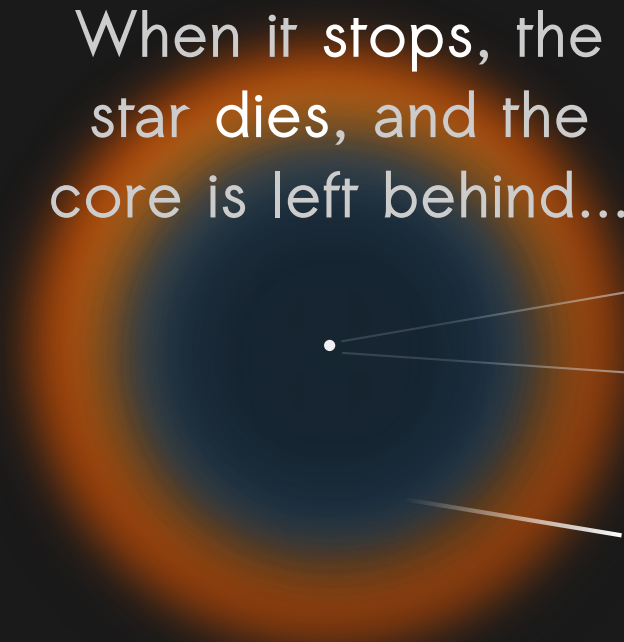
A WHITE DWARF  
is the burnt out  
core of a dead star

Stars stay bright  
because of  
nuclear fusion

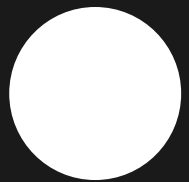


This is the future  
of our Sun!

When it stops, the  
star dies, and the  
core is left behind...



The  
White Dwarf



Planetary nebula: The envelope of  
the star is ejected into space as it  
dies, creating beautiful colours and  
patterns.

They are...



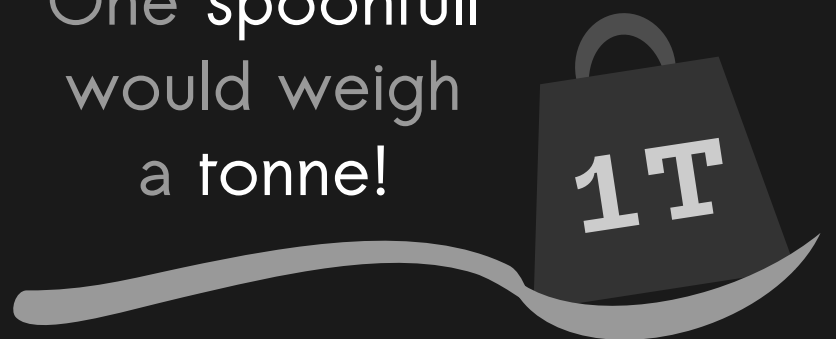
60% the mass  
of the Sun



Earth-sized

So dense that...

One spoonfull  
would weigh  
a tonne!



They are made of...

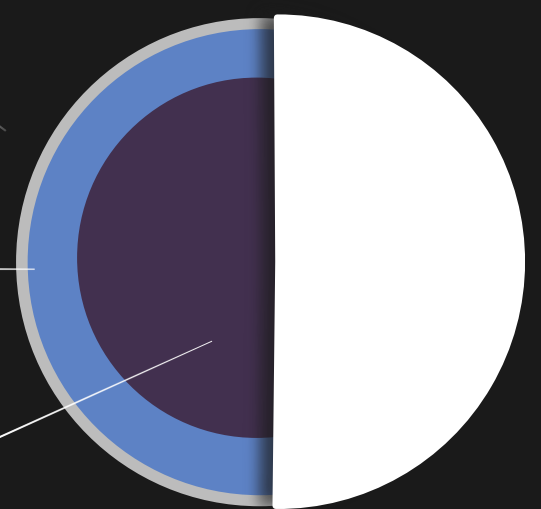
Left-overs from  
the dead star...

and by-products of the  
fusion that powered it.

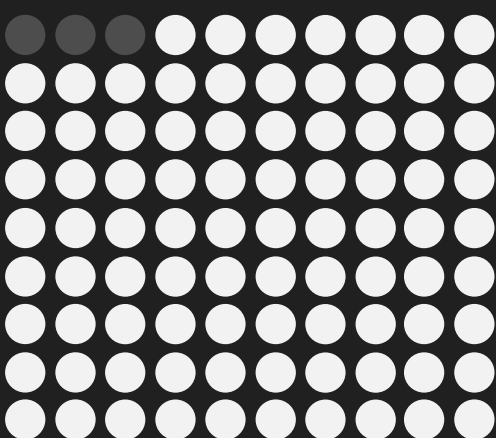
A thin Hydrogen  
atmosphere

A Helium rich  
envelope

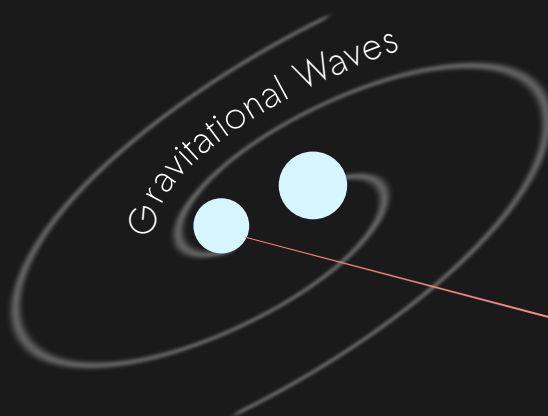
A Carbon and  
Oxygen core



97% of all stars  
will become  
White Dwarfs



And if two of  
them merge...



Supernova  
explosion



...they release gravitational  
waves and a supernova!