

Great Ball of Fire

(To the tune of *Great Balls of Fire* by Jerry Lee Lewis)

... Take gas and dust, in a nebula
Collapses to form a, proto star
Under this weight, you will create
A main sequence, great ball of fire!

The hydrogen's so hot, it's likely to fuse
to helium plus energy, some mass it will lose
E is m c square, in a sunrise over there
Our main sequence, great ball of fire!

*Will it explode-by, supernova?
Super giant?
Under forty solar masses leaves a neutron star
So bright, then, good night
It outshines a galaxy with all its light*

A hundredth of a solar mass, you get a brown
dwarf
Lasts basically forever, after its birth
When our sun gets old a Red Giant we'll behold
A really massive, great ball of fire!

Instrumental C F G FCC x2

*Will it explode-by, supernova?
Giant and a white dwarf?
Will the core exceed the Chandrasekhar mass?
So bright, then, good night
It outshines a galaxy with all its light*

A group of stars that die, makes, nebulae
Bits of gas and rock a stellar nursery
Gravity attracts and this cloud again contracts
Making new born great balls of fire!

*Really massive, stars are special
When they explode
They leave a black hole in space and time
But it's fine, said Einstein
If Physics was too easy that would be a crime*

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Andy "Dijon" French. December 2022

