

Stellar Life Cycle Lab

Start with an overview at <http://cse.ssl.berkeley.edu/bmendez/ay10/2000/cycle/cycle.html>

Write a brief description of the various stages of the lifecycle of a low mass star (one that will end up as a white dwarf) and also the various stages of a high mass star. For the high mass star, what determines whether or not the star will wind up as a neutron star or a black hole.

Things you should include: at each stage, if any material is being ejected into space, what does that material consist of (such as gas that hasn't seen any fusion during this particular cycle through a star, gas that has seen fusion, etc.). Note where this web site is missing images and locate some (and put in your description, along with the web address). For instance, under "Massive Supergiant", the Hubble picture of Betelgeuse is missing. It can be found (along with some additional neat images of Betelgeuse) using the search function from "Astronomy Picture of the Day" at <http://apod.nasa.gov/apod/>

Also, see if you can find the lengths of time that various mass stars would remain in each of these life cycle stages.

This should take you about two hours. Please type this up, print it out and bring it to class on Friday October 15.