Physics 1311
Spring 2020
Homework/Study 9 (Two-sided)

Chapter 12

1. Where change causes a sun-like star to start leaving the Main Sequence?

2. As a sun-like star leaves the Main Sequence, where is it headed??

3. What basic property of a star determines how it will end its life?

4. What happens at the Helium Flash?

5. Do stars evolve along the Main Sequence (like from Type O to F)?

6. When in its life does a sun-like star produce a planetary nebula?

7. Briefly describe the object found in the center of a planetary nebula.

8. Can an evolved star burn Hydrogen and Helium simultaneously?

9. What circumstance can produce a nova event?

10. What are the two types of supernova? (brief descriptions of the actual process - not just what it looks like)

11. Why are supernova explosions significant to you?

12. What can we say about the age of a star cluster whose H-R diagram shows that the stars hotter than type G (like Sun) have left the Main Sequence?

13. How can an astronomer identify a supernova as Type I or Type II?

14. Can the Sun ever explode as a supernova? Explain briefly.

15. Describe the remnants a type II supernova leaves behind.