Week 8 Vocabulary

1. High Mass Stars==stars with a mass greater than 3 solar masses or in other words three times more massive than our sun
2. Low Mass Stars==stars with masses ranging from ½ the mass of the Sun to 2 times the mass of the Sun
3. Nebula==a cloud of gas and dust in outer space, visible in the night sky either as an indistinct bright patch or as a dark silhouette against other luminous matter
4. Main Sequence Stars==a major grouping of stars that forms a relatively narrow band from the upper left to the lower right when plotted according to luminosity and surface temperature on the Hertzsprug- Russell diagram
5. Red Giant ==a luminous giant star of low or intermediate mass in a late phase of stellar evolution
6. Supernova ==a star that suddenly increases greatly in brightness because of a catastrophic explosion that ejects most of its mass
7. Planetary Nebula ==a ring-shaped nebula formed by an expanding shell of gas around an aging star
8. White Dwarf ==a small very dense star that is formed when a low-mass star has exhausted all its central nuclear fuel and lost its outer layers as a planetary nebulas.
9. Neutron Star==a celestial object of very small radius and very high density, composed predominantly of closely packed neutrons.
10. Black Dwarf ==a type of dwarf star classified as a compact star, representing the endpoint of stellar evolution.
11. Black Hole==a region of space having a gravitational field so intense that no matter or radiation can escape.
12. Fusion Ignition==the point at which a nuclear fusion reaction becomes self-sustaining.
13. Protostar==a contracting mass of gas which represents an early stage in the formation of a star, before nucleosynthesis has begun.
14. Stellar Nebula==the nebulosity surrounding a star: a star’s shell or envelope of nebulosity
15. Massive Star==a star with a mass eight times greater that that of the Sun.