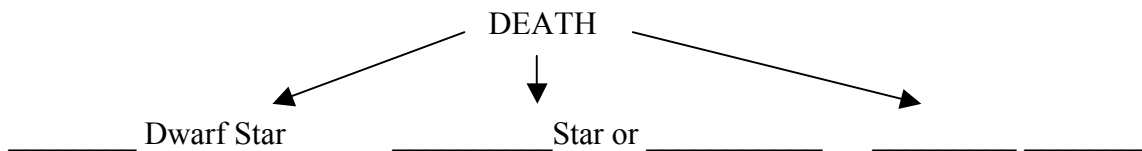


Name _____ Date _____

Notes: Star Life Cycle

1. Gases (ex: _____) and Dust (ex: _____) start to clump together.
Gravity: _____ law: All particles _____.
2. _____: cloud of gas and _____ held together by _____. Smaller pieces may break off to form _____, if too small may form _____.
3. _____ due to _____. The temperature begins to _____. Cloud rotates and flattens into a _____.
4. _____ Star: contractions in the core due to _____; _____ is fused to form _____. The star is "burning" _____, this is referred to as "nuclear burning".
5. _____ runs out in core; core _____ and stars _____ to find more hydrogen in the _____, until all the _____ is gone.
6. _____: star now "burns" _____ in the core and in the shell. The star pulses a few times during this time.
7. _____ runs out as helium fuses into _____, when helium is gone, it expands more.
8. _____ runs out as carbon is fused into _____ like _____, _____, _____, and _____.
9. Depending on its _____ the star will die in a variety of ways.



W _____ Dwarf Stars: have a mass of _____ solar masses or less (<8M) loses their outer shell by solar _____ that develop, last for about 100,000 years. Core of _____ and _____ is exposed, being very hot, glows, ionizing the blown off _____ and _____, shows a _____ nebula around the white dwarf star.

Stars with mass around _____ M collapse and _____ in a _____. They are so _____ they can be seen in other galaxies. A _____ star is left behind. Called that because protons combine with electrons to produce neutrons in the core. This creates a supernova _____, a luminous nebula of gas and dust. The remaining star size can be about _____ km across.

_____ are neutron stars that are _____ at high speeds, producing a _____ of radiation that can _____ across Earth's orbit.

_____ are neutron stars with magnetic fields _____ to _____ of times larger than those of radio-emitting pulsars. Can have _____ when magnetic fields shift, causing crust to _____ and emit _____ rays.

Black holes form from stars greater than _____, the collapse of the core is _____ stopped and collapses completely on itself.

