**FUSION NOTES**

Fusion and Fission are reverse processes or opposites.

* Fission is the splitting of a large atom into two or more smaller ones
* Fusion is the fusing of two or more lighter atoms into a larger one.

Fusion reactions power the sun and other stars.

 - This happens because when a fusion reaction occurs energy is released.

 -Fusion in the core of stars is reached when the density and temperature are high enough.

 -The star is balanced by the force of gravity pulling in and the energy moving out.

* **Stars are driven by nuclear fusion rxns.**
* Huge mass causes high temps and pressure

Nuclear fusion inside the star

 There are different fusion cycles (rxns) that occur in different phases of the life of a star.

* All stars begin by burning hydrogen
* The first fusion cycle is:

 H+H He + energy