

What is a Star?

- * A star is a very large ball of gas, usually hydrogen and helium, that glows from it's own energy.
- * Stars are different from planets in that they are "self-luminous," meaning they actually produce light. Planets do not do this.
- * The intense heat and pressure within the star actually squeeze the hydrogen atoms together to form helium (other elements may also be formed during this process). This is where all elements of the Universe were formed.
- * This process, which releases tremendous amounts of energy, is called **nuclear fusion**.
- * Stars are not "burning", rather they are undergoing continuous nuclear reactions.
- * The Chart below, found in your ESRTs, illustrates the different temperatures and brightnesses of stars. You can also see a stars life-cycle on this chart.
- * Notice that the Sun is a **main sequence** star meaning it is average temperature and brightness and that it is about half way through its life.

