LIFE CYCLE OF A STAR



STARS

Stars are immense, luminous spheres of extremely hot gases. Although they shine brilliantly, they are not eternal. They pass through various stages known as the life cycle of a star.



LEARNING OBJECTIVES

explain how stars are formed and their life cycle describe the different stages of a star's life span

explain how the mass in a star affects the star's life span

WHAT ARE THE DIFFERENT STAGES IN STAR'S LIFE CYCLE?



STELLAR NEBULA

All stars originate from nebulae, which are massive clouds made of gas and dust.

NEW STAR

The core of a star shines brilliantly due to the nuclear reactions taking place. This process of nuclear fusion is responsible for the formation of new stars.



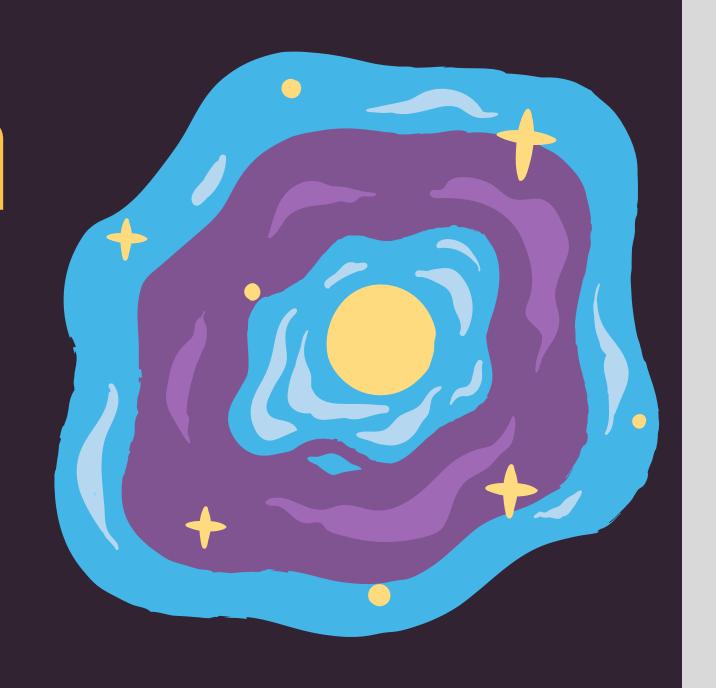


RED GIANT STAR

During the final stages of its lifetime, a star will expand, cool, and change color, eventually becoming a red giant.

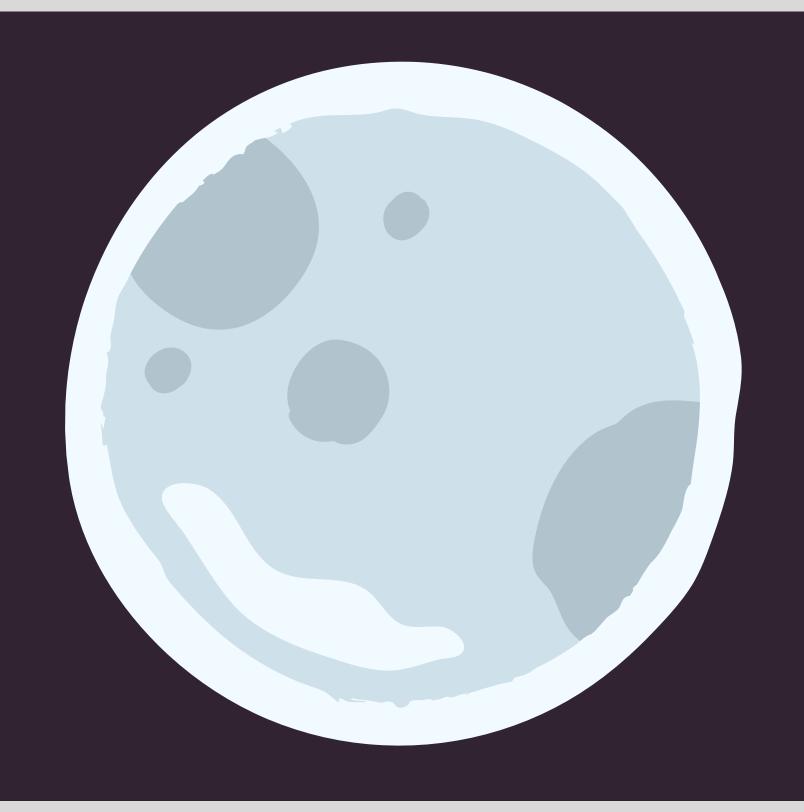
PLANETARY NEBULA

As a smaller star begins to cool down and lose its glow, it will eventually go through the planetary nebula stage.



WHITE DWARF

White dwarfs are the dense, hot remains of stars that have already perished. These remnants form when a star has depleted its fuel and releases gases into the surrounding space.



THANK YOU!

I hope you learn something new today!