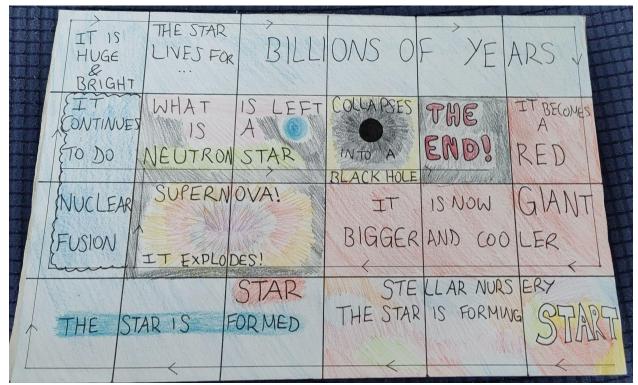
## STS Report 2025

The purpose of this game is to teach children about the life cycle of a high mass star and encourage a love of science. The Life of a Star is aimed at children aged 9+. The board game takes the player through the life of a star, explaining simply what happens at each stage.



### **Instructions**

In this game all the stars are high mass stars which is why they have this specific life cycle, if they weren't as big then the stars would not be able to do all of this.

#### <u>Aim</u>

To get to the end of the life cycle of a high mass star first.

#### Set Up

Put down the board wherever you are playing and set the pieces on the 'Start' space. Get out a piece of paper and set up a table with each player's name at the top to keep track of scores.

#### **Beginning**

The youngest player goes first, and then clockwise around the circle. The first player will roll the dice and move the amount of spaces according to the number facing upwards on the dice. Every time you roll the dice add the value under your name and continue to keep track of the scores for each player.

#### **Rules**

You cannot leave certain stages until you have at least a certain number of points. If you have rolled to get past the current stage but have not yet got the correct number of points then you cannot move until the correct number of points has been reached. The points are meant to simply represent energy that the star is making and using through nuclear fusion.

To leave Stellar nursery: **15 points**Points are now irrelevant, just continue until the end and it doesn't matter if you roll more than required to land on 'The End' space.

### **Discussion**

As players journey around the board they are being taught what happens at each stage of the life cycle. By gaining and losing points they are also being taught about how the star must gather energy and then use it up. Climate change is a huge problem affecting people all over the world. Since realising the issue humans have tried to work out sustainable sources of energy. By inspiring young people to be interested in stars and space, we are then planting the seed in their minds about how to solve climate change. These are the people who could find new energy sources by investigating how stars make and use their energy.

## **Bibliography**

BYJU 2019, Life Cycle Of A Star, BYJUS, Byju's.

<u>Las Cumbres Observatory 2019, High mass star | Las Cumbres Observatory, Lco.global.</u>

NASA 2015, The Life Cycles of Stars: How Supernovae Are Formed, Nasa.gov.

The Schools' Observatory 2015, Stellar Evolution | The Schools' Observatory, Schoolsobservatory.org.

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