

4.7 Star Cycle

Create a model of the star cycle

Star Cycle Introduction

Like humans, stars go through a cycle from fetus to old age. Your task is to create a model that shows the cycle stars go through, from the formation of the star to its death. You will use your model to make predictions about when and how our star, the Sun, will “die.”

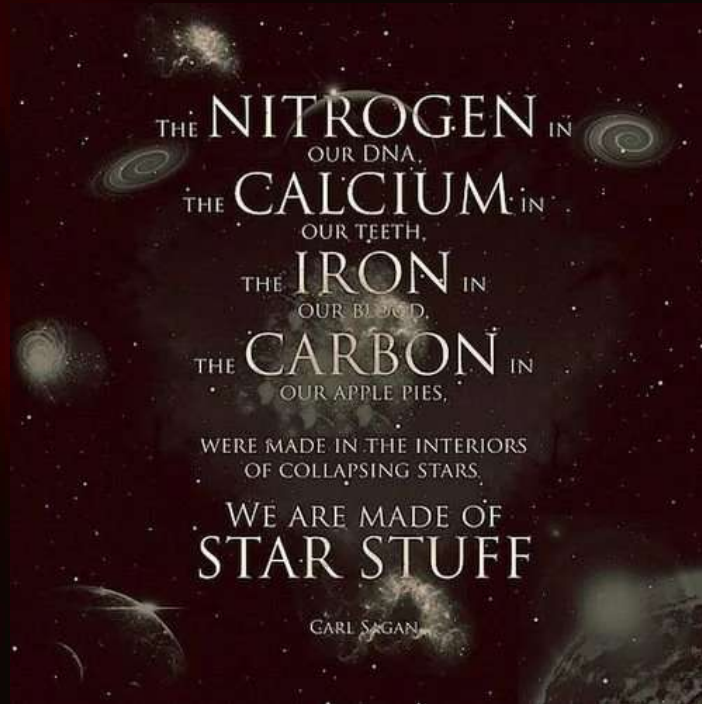


Model Introduction

You will be making a model for the life cycle of stars. Your model will:

- Include all star types you discovered in 4. 6
- Be able to make predictions about the life of our star, the SUN
- Explain how the elements LARGER than iron were formed.

Read this quote from Carl Sagan:



 What do you think Carl Sagan meant by “We are all made of star stuff?”

Students, write your response!

What other astronomers think.....



Get your group organized

You will be working in a group of 3 students researching facts about the different stages of the star cycle. Assign each person one of the options below.

Option 1: [Life Cycle of Stars from CK12-Grade-Level Textbook](#) like reading

Option 2: [7 Main Stages of a Star from Sciencing](#)-A web-based popular science website, Shorter article at grade level

Option 2: [The Life Cycle of Star Video](#)-You Tube video from the Institute of Physics.

What option are you doing?



Students choose an option

Get a piece of paper

Seperate your paper into 11 smaller pieces

Title each piece the following

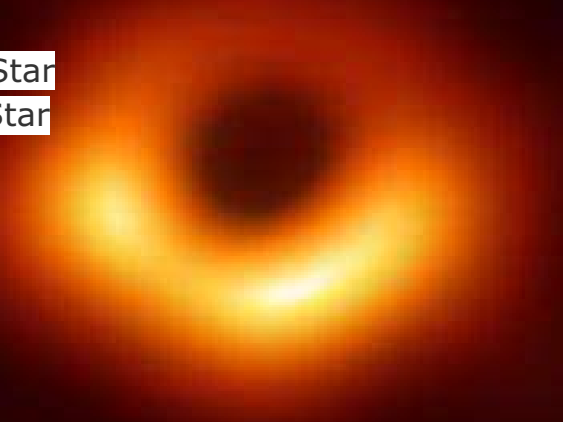
- Protostar
- Nebula
- Black Hole
- Planetary Nebula
- Average Main Sequence Star
- Massive Main Sequence Star
- (Red) Giant
- Super (Red) Giant
- Neutron Star
- Supernova
- White Dwarf



Write what you already know

You already know facts about these 5 types of stars. Use your notes from “4.6 Types of Stars” and write down 3 facts you already know.

- Average Main Sequence Star
- Massive Main Sequence Star
- (Red) Giant
- Super (Red) Giant
- White Dwarf



Complete additional research

Read or watch your assigned resource and add more facts to your 11 pieces of paper. You might not fill out information on EVERY card. Some resources do not give information about every part of a star's cycle. Links for the articles or video are found in the Schoology Folder



Part 1: Star Cycle Research

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