

## **Stellar Evolution**

### **The Life Cycle of A Massive Star**

Your absent-minded astronomer friend suddenly realized she needed to be in Switzerland to address a meeting of international astronomers. She asked if you could do her a big favor while she was gone. She promised a local middle school science teacher that she would do a slide show presentation for the eighth grade. The presentation would be on the life cycles of mid-sized and massive stars. She said she would supply you with the slides and the script. All you had to do was show the slides and read the script. She would drop them off on her way to the airport. You agreed to help her out.

She knocked on your door and handed you a manila envelope. "Thank you so much for doing this. Good luck," she exclaimed, as she dashed away.

You opened the envelope and saw two sets of mixed-up slides. Lo and behold, there was no script! In her haste, she forgot to put the slides in order and include the script.

Fortunately, you have had several conversations with your astronomer friend about the life cycles of stars, and are familiar with the HR diagram. You decide you can still do the presentation for her.

Your task:

Two sets of ten slides (one for mid-sized stars and one for massive stars), labeled A through J, are on the following pages. Put both sets of slides in the order that shows the stages in the life cycle of a mid-sized and a massive star from birth to death. Write a short description of each stage that describes that stage in the life cycle. The description must be understandable to an eighth grade student.

Good luck! I'm sure you will put together a "stellar" presentation for the eighth grade class!