## Our Cosmic Connection Webquest Task Description:

While you are absent from school for two weeks with the flu, you are missing the chapter on stellar evolution in Earth Science class. Before you will be able to return to school, the class will have finished their oral presentations on the evolution of mid-sized and massive stars, and turned in an organized portfolio of supporting materials for their presentations. Since you have a computer at home, your teacher has developed a webquest version on stellar evolution that you can substitute for your oral presentation, so that you will not fall behind the rest of the class.

You will access a website that has 24 numbered and un-sequenced images of various stages of stellar evolution. There are enough stages represented to arrange the images in a sequence from formation to final end product(s) for mid-sized and massive stars including a Type Ia supernova event. Some of the images may be used for more than one type of sequence. Except for the Image #1 of the Earth, there is a link below each of the images. Since you have missed all the classroom lectures and discussion about stellar evolution, you may have a difficult time understand what evolutionary stage each of the images represents. To help you determine what the images are, click on the link below each image. The links will take you to objects that are in a similar stage of evolution as the image on the website. Write a brief description of what stage each object represents for each of the numbered images.

To accomplish your task your teacher will provide you with the following materials:

A. One or more <u>PDF</u> print-outs of the images from the website with space for you to write a brief description under each image

## OR

B. One of more sets of the <u>Image Set</u> of 24 images AND one or more sets of Templates

For option A: Once descriptions have been entered under the each image, cut out each image with its description – you now have 24 separate images. Arrange the images into the sequence(s) designated by your teacher.

For option B: Use the written descriptions that you have for each of the 24 images from the website and attach the appropriate images from the card set onto the spaces provided above the description. Arrange the images into the sequences(s) designated by your teacher.

Your teacher may assign one or all of the three sequences.

- 1) A mid-sized star
- 2) A massive star
- 3) A Type Ia supernova

The website is located at:

http://chandra.harvard.edu/edu/formal/stellar\_ev/webquest/index.html