

Constellation Project

Each pair of students will have one constellation that they are responsible to become an expert on. Each person will know when that constellation will be visible, where in the sky it is visible and what the three dimensional layout of your constellation is. You will use the planetarium as you share information about your constellation with the rest of the class.

For the next several weeks, we will work on this project as well as on some other things related to the light we see from these constellations. Learning how to operate the planetarium requires you to hold up your end of the work. Be a responsible student during the independent learning time and be contributing group member during the group learning time.

Your constellation project will have the following content components:

Content

1. Constellation information
 - a. Name and location in the sky – this includes the season that it is visible as well as the direction in the sky.
 - b. You must be able to point it out in the Planetarium or Star Lab.
 - c. Myth – the Greek or Roman myth that occupies this constellation along with one other culture's story about this group of stars.
 - d. 1st magnitude stars named and location noted; other stars noted.
 - e. You should be able to point out the 1st magnitude stars.
 - f. Explanation of any Messier objects or other deep sky objects. *You should be able to explain what the Messier object is. For example if you have a planetary nebula you should be able to explain what a planetary nebula is.*
 - g. 3-D model of the relative distances between your major stars.

Presentation

1. Constellation information should be presented using the planetarium. You may want to use the slide projectors to share information about the myths or constellation picture. I have many slides you can chose from or you may be able to make your own. The video projector is also available to project documents from a computer.
2. Have your 3-D model ready for your presentation.

Reflections

You must have a reflection for the entire project. A reflection is your thoughts on the project you have completed. It allows me to get a glimpse of your opinions and beliefs about the project you created and how you think it relates to the objectives.

When writing reflections . . .

Look at your work and write about the finished product AND how you went about completing the project. Think about

- a. Did your project meet the stated objectives? How do you know?
- b. How did you go about completing this project? Did you learn anything new about yourself as a learner?
- c. What do you better understand about astronomy as a result of working on this project?
- d. What new questions do you have as a result of this project?

You might begin your reflections with one of the following phrases:

This is my favorite piece because ... I'll remember this piece 20 years from now because ...
If I could do this piece over again, I would ... This piece will surprise many people because ...
This piece surprised me because ... My parent(s) liked this piece because ...
This piece was my greatest challenge because ... This piece related to my life because ...
I choose this item because ... If my parents/friends saw this they would think ...
This piece helped my to comprehend ... This piece was not my best work because ...
The strength of this item is ...

You should have one (1) reflection to hand in the class after your presentation.

Constellations

| Fall Constellations | Winter Constellations | Spring Constellations | Summer Constellations |
|---------------------|-----------------------|-----------------------|-----------------------|
| Aquarius | Triangulum | Cancer | Scorpius |
| Pisces | Gemini | Leo | Sagittarius |
| Canis Major | Orion | Virgo | Ophiuchus |
| Pegasus | Perseus | Cetus | Capricornus |
| Lyra | Cassiopeia | Hydra | Hercules |
| Cygnus | Auriga | Ursa Major | Draco |
| Taurus | Canis Major | Coma Berenices | Vulpecula |
| Andromeda | Serpens Cauda | Canes Venatici | |