

Constellation Planetarium 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 class periods, we will work on this project as well as on some other things related to 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.

Presentation

Your constellation project will utilize the planetarium projector. Your presentation will have two parts.

Part 1 – You will present information about your constellation in the planetarium. Your presentation should include the following components:

1. You should be able to point out your constellation in the planetarium with the remote.
2. You should be able to explain what time of year the constellation is visible. (season)
3. You should be able to explain where in the sky you should look to find it. (direction)

Part 2 - You will make a script that runs a planetarium program that is 3-5 minutes about your constellation. Your planetarium program must have the following content components:

1. Turn on constellation – both constellation lines and constellation name
2. Turn on artwork (related to myth)
3. Record myth – can include additional pictures – you may want to find out if the planetarium has another culture's pictures and story for the stars in your constellation
4. Show boundary in sky for your constellation
5. Show at least two deep sky objects that are within the boundaries of your constellation. You should be able to explain what these objects are. For example if you have a planetary nebula you should be able to explain what a planetary nebula is. You might have to get additional pictures to include in your program.

Reflection

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. Your reflection should include answers to the following questions:

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 want to 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) **typed** reflection to hand in the class after your presentation.

Constellations

Fall Constellations	Winter Constellations	Spring Constellations	Summer Constellations
Aquarius 5	Vela 9	Cancer 3	Scorpius 4
Pisces 9	Gemini 2	Leo 5	Sagittarius 15
Canis Major 5	Orion 12	Virgo 11	Ophiuchus 7
Pegasus 5	Perseus 2	Cetus 7	Monoceros 8
Lyra 2	Cassiopeia 13	Hydra 9	Hercules 2
Cygnus 4	Auriga 3	Usra Major 7	Draco 6
Taurus 3	Sculptor 6	Coma Berenices 8	Vulpecula 5
Andromeda 3	Serpens Cauda 3	Canes Venatici 5	Eridanus 4

Deep Sky Objects – Identified by Messier & NGC (New General Catalog) number – m_?_ or ngc_?_