

Name: _____


Period: _____ Date: _____

LAB: An Introduction to the Celestial Sphere Astronomy



Planetarium!

Open the app on your Chromebook and let's start with the basics...

1. Set your location by clicking on the location icon. Why is this important to do? Explain.
2. Click the  icon. What is this and why would that be helpful in studying the sky?
3. Drop the screen down to the gray line. What do you think that gray line represents and why would that be important to have on a sky map like this?
4. What can be found in the gray line that would also be important to have? Why is that?
5. Record 5 constellations near the horizon for today's date.
6. How does changing the hours change the sky map? Describe it in detail. (i.e. What disappears? What shows up? How does it move? How do the directions affect the view in the sky?)

7. Change the month to December and check for your 5 recorded constellations. Are they there? Specify the situation for each.

8. There are other points on the sphere we haven't identified yet. One is in the northern direction and written in red. What is that? What's very close to this?

9. Straight up from the surface is marked with a plus. Why do you think this is necessary? Explain.

10. Count the constellations that are currently visible in our sky. Within 24 hours, do you think this number will change? Why or why not?

11. Take some time to explore the sky maps outside of the constellations and major stars. Name three celestial bodies that can be spotted on these maps. Describe three that you found and explain why it is important that these are included on a sky map with the constellations.

12. Let's take a closer look at these constellations! Fill out the table below with 8 constellations of your choice!

Constellation	Constellation Name	Constellation Drawing with Star Points	Cardinal Direction of View	3 Major Stars	Distance	Magnitude	DEC
1							
2							
3							
4							
5							
6							
7							
8							

13. Remove the constellations support by clicking the constellation button. Using your chart above and the timer on your phone (or Chromebook) try to locate all 8 of the constellations on the map. Which ones were easy to spot and why? Which ones were tougher to spot and why? How long did it take you to spot all 8 of your constellations?