

Name	 	
Class _	 	

Launch Milky Way – Star Color

Don't forget to record data and observations as you work through this activity. All of the questions and reminders from the activity are listed in order below.

- 1. Describe the differences you observe between the image of the sky as seen from a dark site and the one of the three stars recorded by the SDSS telescope.
- 2. List some reasons these two images appear so different.
- 3. Record the coordinates for your starting place.

RA – Dec -

4. In the Look for Patterns section of this activity, you should notice some patterns related to how the magnitude scale itself is organized and between the magnitude measurements in different filters and the colors you observe. Explain your observations with evidence. If you are able, cut and paste image examples that support your observations.

5. Color. In this section you build an understanding of the difference between what we **see** as the color of a star and what is **measured** as magnitude through the each of the SDSS filters. We are not able to describe a star's color using magnitude measurement alone. Give an example.

- 6. From the information provided in the Color section, write a definition of color in astronomy.
- 7. Explore Color Calculations. Record the method you used to explore the relationship between the observed color of stars and their calculated value for color. What tools did you use? How did you use them? What data did you gather? What improvements did you make to your methods as you developed your procedures? Did you run into any problems? You can report them <u>HERE</u>.

8. Report your data here, screen capture images or link to another file.

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- 9. Conclusions. Write a clear paragraph of your understanding about how color is reported in astronomy.
- 10.What new questions could you ask about astronomical objects now that you have color to use as a tool for exploring?