**Astronomy Star Project**

**Adapted and modified from Erik Christensen**

Astronomy Star Project

Some people spend money to have a star named after them.  Others wish on stars.  During this unit, you will be choosing your own “personal” star that you are to study in greater detail during the next few weeks by applying the material from the textbook, videos, and the Internet.  If you work on this each week as we study the different concepts, you will easily be able to complete this task in bite-sized pieces and hopefully you will find this an excellent way to deepen your understanding of the material in a very personal way.  For some aspects, you will need to research your star using other external resources, including the Internet.  Be sure you cite all your references!

There is **no prescribed format or length for this project**.  Instead, you are encouraged to use your own creativity.  Possible formats could include a **PowerPoint presentation, a video presentation, a podcast, a webpage, or even a standard written report.**  Extra credit will be awarded for projects showing exceptional creativity.  Feel free to include graphics, hyperlinks, music, bulleted lists, etc…  Regardless of the format that you use, your project must clearly include (and identify) the following information about your star:

1.    **Distance, Location, Names, and Magnitude**.

a.    How far away is your star?  Compare/contrast this with our Sun.

b.    Where is your star located?

c.    How would you go about finding it in the Colorado night sky?

d.    What other names does your star have?

e.    What are the absolute and apparent magnitudes of your star?  Be sure to explain what these two terms mean.  Compare/contrast this with our Sun.

2.    **Star’s Story**.  Find out more about your star from a historical perspective.  This is not technical information but rather, myths, history, or cultures that involved your star.

3.    **Classification**.  Discuss the specific spectra of your star.  Be sure to explain what this means.  Compare/contrast this with our Sun.

4.    **H-R Diagram**.

a.    Where does your star fit on the H-R diagram?  Compare/contrast this with our Sun.

b.    Discuss this in terms of both its size and lifetime.  Compare/contrast this with our Sun.

5.    **Lifetime**.

a.    What is the lifespan of your star?  Compare/contrast this with our Sun.

b.    How old is your star right now?  Compare/contrast this with our Sun.

6.    **Possibility of Life**.  Suppose that there is a planet orbiting your star that has the right conditions to sustain life.

a.    What would you do to communicate to that planet from Earth?  Be sure to take into consideration how far away your star is.

b.    How would you want our civilization on Earth to be seen by life on that planet?

The Star Project is**due as December 14th**.  It **MUST** be submitted via email to [wujeks@wiggins50.k12.co.us](mailto:wujeks@wiggins50.k12.co.us) in an approved format (if unsure, check with your teacher).  **Failure to submit it in an authorized format before class on the due date will result in a minimum of 20 point deduction.**

**Scoring Rubric**

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| --- | --- |
| **100 points** | All items included and discussed |
| **40 points** | Material is presented neatly and coherently |
| **20 points** | Communication is presented clear and effective |
| **20 points** | References cited |
| **180 points** | ***Total*** |

You can earn EXTRA CREDIT points if especially well done with evidence of thought that goes beyond stated objectives **and** for demonstrated creativity.

PLUS a 10 point  **BONUS**if turned in at least one week early (as per the syllabus)