

3rd Nine Weeks Extra Credit Opportunities

You may select ONLY two of the three assignments described below to earn extra credit this quarter. If done properly, each assignment will give you a 5% boost to the overall grade. In other words, if you do both assignments well, you can bump your final grade an entire letter grade up. I will not count any third assignment, but I will allow you to pick the assignments you did the best on for most credit.

DUE DATE FOR ALL ASSIGNMENTS: Friday March 27th***

These assignments are fully optional and can only help you. Even if you do “bad” on this, it just won’t boost your grade as much. So PLEASE follow the few directions I give here as you complete this easy A.

Option 1- Create Aliens

Directions: Put your creative hats on and help us envision what an astronaut might find on a far planet. Write a story with an accompanying picture of what extraterrestrial life may look and act like on a planet outside our solar system. You should have the following things:

- One short story and picture of the extraterrestrial life, and **they must be handwritten without AI** (can be done on goodnotes).
- Must include details of the basic needs for the lifeform. They can be the same three requirements as life on Earth or different ones, but you should explain what they are and how they are acquired by the organism.
- Describe what you think the organism looks like through the story as well as the photo.
- Detail whether humans could live with them or not, as well as one important thing we could learn from their existence to help our own society and advance technology.
- Turn in the pdf to Archie.

Option 2 – Appreciate Art

Directions: See for yourself what types of images we’ve made of the stars, galaxies, and planets of our solar system. Your goal is to research a specific image of an object in space and explain how it was obtained. Your report should have the following:

- A specific image of some object in space with its name and a description of what type of object it is
- Information about its location including: how far it is from Earth; the size of the object; and what other features are nearby (what galaxy its in, what planets or stars are near by, etc.)
- A description of how the picture was obtained including: what telescope took the image; what type of electromagnetic radiation was detected; and what specific organization (university or governmental agency) was responsible for obtaining the image.
- A bibliography in ACS format citing the sources used to obtain the information for the report. You may use citation generators online to help.
- **All information must be handwritten without AI**, with the exception of the bibliography (can be done on goodnotes).
- Turn in the pdf to Archie.

Option 3 – Send a rocket

Directions: You may not work at NASA, but you can still see for yourself what it takes to defy gravity. I want you to investigate the effort it takes to build your own rocket. You'll learn how to make a bottle rocket and see what variables you need to help the rocket fly higher. Your report should have the following:

- Details about how you built your rocket, including materials and steps to construct the rocket.
- A paragraph explanation of what is allowing your rocket to move. This should include: the specific materials/chemicals used to propel the rocket up; a description of the forces and/or chemical reactions that are pushing the rocket; and how you can change any of the materials to increase the height of the rocket's path.
- A video of your rocket flying up.
- A bibliography in ACS format citing the sources used to obtain the information for the report. You may use citation generators online to help.
- **All information must be handwritten without AI**, with the exception of the bibliography (can be done on goodnotes).
- Turn in the pdf of the report and video through email.