Astronomy IB PROJECT MYP/Year 1/Quarter 1

This project includes the following components:

Part 1: An Astronomer's Viewpoint

- Investigation and collecting facts (to be done at home and in class).
- Writing informative essay (to be done at home and in class). The essay cannot be more than one page. It can be typed or handwritten. All math language should be highlighted. <u>Due Date:</u> <u>Tuesday, September 10, 2018</u>
- Creating a reference page (to be done at home and class). <u>Due Date: Tuesday, September 10,</u>
 <u>2018</u>

Part 2: A Visual Presentation (all items are stapled/taped/glued onto a large piece of construction paper (to be done in class).

Part 3: Student must turn in grading rubric with the back of the rubric (student reflection) portion filled out. This is where the student writes down what he/she learned and which part of the project was the most interesting. **Due Date: Tuesday, September 10, 2018.**

Calendar snapshot:

Thurs: Class time will be used for part 1. Fri: Class time will be used for part 1 and 2. Tues: Class time will be used for part 2 and 3.

Notes:

In the attached IB Rubric, the column on the extreme right is the one the student should follow.

- Mathematical Language means the use of math vocabulary words and phrases.
- A variety of ways (forms) to present mathematical information means to show how whole numbers, integers, and rational numbers are represented after adding, subtracting, multiplying, and/or dividing them. The representation of these numbers can be using symbols, charts, and graphs.

Part 1: An Astronomer's Viewpoint

What do you find interesting about our sky? Is it the stars, planets, or galaxies? Or could it be the sun, moon, clouds, or atmosphere?

In this part of the project, you will look into the sky like an astronomer would, but instead of using a telescope, you will use your computer. Pick one topic you find interesting to investigate and write about it in your own words. Remember, that numbers are used to describe and calculate everything around us, so it should be easy to show how math is used for the topic you chose.

Here is an example of an outline I would use if I were talking about something related to oceans (I chose something not related to astronomy on purpose).

- The oceans take up **approximately** ____<mark>%</mark> of the Earth's surface.
- Water gets into the oceans by way of ice, rivers, and rain. The percent of ice that goes into the ocean is _____. The percent of water that goes into the ocean is _____. The percent of rain that goes into the ocean is _____.
- The number of gallons of water the oceans hold it would be _____ gallons.
- Approximately _____ thousands of species live in the oceans.
- All oceans have salt water. The amount of salt in oceans measures _____ %.
- The reason why ocean water is unsafe for humans to drink is because our body cannot process the salt. This is because our blood can only dissolve 9 grams of salt per 1000 grams of water which is 9/1000). Ocean water has 35 grams of salt per 1000 (35/1000) which is more than the body can handle.

Notice that measurement played a big role in my facts, but I showed a variety of ways to represent it.

Instructions:

- 1. Pick one topic to investigate about the sky.
- 2. Investigate the topic on the computer and in books. Keep track of the URL (the website address) and the book title to put on your reference page.
- 3. Collect the facts and put the information down in OUTLINE form to help you remember.
- 4. Write an INFORMATIONAL essay using complete sentences and proper spelling and grammar.
- 5. Create a Reference Page with the internet sites and books or magazines used to get information.