

# Telescope Packet/Web Quest

## ***“Telescopes from the Ground Up” Activity***

Addressing Astronomy standard SAST1, which states “Students will be able to explain the tools used by astronomers to study electromagnetic radiation to determine composition, motions, and other physical attributes of astronomical objects.”

Go to the following link:

<http://amazing-space.stsci.edu/resources/explorations/groundup/>

Go to Site Map at the bottom right-hand corner.

### **Task One (Day One):**

Read the Biographies and take notes on the following five scientists: **Galileo, Edwin Hubble, Sir Isaac Newton, William Herschel, and his sister Caroline Herschel.**

**Place these notes 2<sup>nd</sup> Nine Weeks section of your notebook or binder. Teacher will come around and stamp completed assignment.**

Go to the following link:

<http://amazing-space.stsci.edu/resources/explorations/groundup/>

Go to the Star Tree beside the man with the telescope.

### **Task Two:**

Start looking at the purple stars concerning **Refracting Telescopes** looking at the ***Era of Galileo’s Refractor*** first and continuing on from that star to follow the other two stars.

Click on EVERY link within a page, and read through each page of the era pages presented under the single star.

**\*\*Write a paragraph summary of the information collected from each star. (Three paragraphs = one per purple star) This task should be placed in the same section as Task 1.**

**Task Three (Homework/Non-group assignment, if you don't finish in computer lab):**

You will have today through Sunday night to complete these three activities.

**Part A:**

Read each one of the green stars concerning **Reflecting Telescopes** starting with the ***Era of Newton's Reflector*** and doing the same thing you did in class with refracting telescope stars (visit each link, read each page, and write a paragraph about that era/star. There should be seven paragraphs total, because there were seven stars.

**\*\*This assignment should be placed in your notebook in the same place as Tasks 1 and 2.**

**Part B:**

Create a ***Venn Diagram*** comparing and contrasting refracting telescopes and reflecting telescopes. Instead of using circles, use stars or telescopes to show where they are the same and where they are different.

**\*\*You will need have a colored piece of printer paper for this task. I have these, so that you will need to get one from me!**

**Part C:**

Create timeline using the 10 stars to highlight your reading over the last two weeks. Be sure to list in dates, peoples, or important events that occurred over the timeframe that these telescopes were developed and how they have impacted the field of Astronomy past and present.

**\*\*The timeline must be on a separate piece of paper or a poster board to ensure that enough room is given for detail and any graphics that would make it an ascetically-pleasing work to display.**

**Task Two and Three are due on Monday, October 26<sup>th</sup>,  
2020.**