Dr. V's 630's Science Weekly Summary
Week of December 18th 2017

Monday December 18th: We reviewed with Dr.U the phases of the moon. Students worked on the back side of the Moon Day 1: What do we see from Earth? Sheet. Students worked to understand why we see - Which side of the moon is lit, Which side faces Earth, Is the visible side of the moon mostly lit or dark? Is the light on the right or the left when viewed from Earth.
Using these 4 steps the students should be able to tell what type of moon. Students also briefly discussed solar and lunar eclipses.

Tuesday December 19th: Astronomy Post-evaluation - If you were absent, plan to make this up after school or before school tomorrow or Thursday.

Wednesday December 20th: Students reviewed the details of why we have seasons. Students were asked to start at Google Doc in their GC science folder called "Astronomy notes". Students were asked to write the reason we have seasons and include the following terms - Hemisphere, tilt, axis, hours of daylight, light intensity, sun angle and revolution in their Astronomy notes. We started with a blank earth with an axis tilt of 23.5°, students added the terminator (day/night) line

Thursday December 21st: All classes except Green class worked on how to draw an eclipse. I introduced my 4 steps to successfully drawing an eclipse.
Step 1) Draw the sun - Unlike when we talked about the seasons, here we think about each point on the Sun as sending light in all directions. The points at the very top and bottom of the sun are where we focus our attention in understanding the light in an eclipse.
Step 2) Draw the second object (Moon or the earth - this decision will determine which eclipse you will create). If you choose the Moon then you will create a solar eclipse, and in contrast if you choose the Earth as your second object you will create a lunar eclipse.
Step 3) Draw the rays from the sun connecting the top of the sun to the top of the second object. You should do the same for the ray from the bottom of the sun to the bottom of the second object.
Step 4) Draw the third object in your row of objects. Where you put the object, and how large the third object is must match with what we know about eclipses. For a lunar eclipse the moon must pass through the umbra (darkest part of the shadow) for 5 hours. For a solar eclipse the shadow of the moon must only fall on a very small part of the earth as the full solar eclipse lasts only minutes.
Green class worked on the phases of the moon assignment in GC. This was due during class.

Friday December 22nd: Classes all spent part of the class cleaning out their lockers once they finished either their phases of the moon assignment in GC (those that finished early and had their drawing checked became "Checkers" for those that needed some additional support). Green class worked on how to draw an eclipse using my 4 steps.