Dr. V's 630's Science Weekly Summary
Week of January 15th 2018

Monday Jan 15th: Martin Luther King Day - School holiday

Tuesday Jan 16th: Students were given time to read my comments on their "Why do we have Seasons" assignment in GC. We provided examples of how they could improve their responses, indicating that the tilt of the Earth was constant towards the north star, that the increases in light intensity and hours of daylight both increase the heat of the hemisphere. Students also needed to avoid saying that the earth was either pointed towards the sun or away as it is really only doing this for a short period of its revolution. We then moved on to revisit the weather unit. We looked at a weather forecast and identified the changes in temperature that happen daily, the impact of cloud cover, that the pressure can change during the day or over a few days and that we can tell when precipitation will occur. Students were asked to identify the type of air mass that was over Arlington today and what type of front will arrive followed by what type of air mass. We reviewed the different options together.

Wednesday Jan 17th:

We reviewed a weather chart from the Wunderground website. We added dew point to our graph and talked about how this graph compared with the temperature graph. We noticed that the dew point was never more than the temperature. We also talked about what "dew" was and that if the temperature was below freezing instead of dew we can get "frost". Both dew and frost occur when moisture in the air is forced out of the air as it cools.

Students identified that yesterday it was cooler than today and that the air today is more moist. We agreed that a cold dry air mass was present and now a warm wet air mass has moved into Arlington. When the new air mass arrived it brought a warm front through.

Students learned what happens when a warm air mass collides with a cold air mass and how this is different from what happens when a cold air mass collides with a warm air mass.

Thursday Jan 18th: Students received a Water Cycle handout and we began to take notes from a PowerPoint presentation on Weather and Climate. Most classes were introduced to the water molecule and the fact that water can absorb large amounts of energy (heat) before it changes temperature. We talk about lakes, groundwater and the distribution of water on the planet.

Friday Jan 19th: Astronomy TEST