

Dr. V's 630's Science Weekly Summary

Week of January 8th 2018

Monday Jan 8th: Astronomy vocabulary quiz. We started a PearDeck on seasons, tides and phases of the moon. Student drew various phases of the moon and we reviewed crescent and gibbous moons. We also clarified waxing and waning. We reviewed how you could tell from an overhead drawing of the Earth, Sun, Moon system if a moon would be visible from Earth at a specific time of day. We reviewed the positioning of the earth for the various seasons relative to the sun,

Tuesday Jan 9th: Early release at 1 pm. Students continued the Pear Deck from yesterday. Highlights included discussions about tides and the importance of both the Moon and Sun in determining how low or high the various tides might be during the lunar cycle. Students were asked to think about how energy is transferred. We used the example of a pot of milk being heated on a stove to create hot chocolate to begin our energy transfer discussion. New terms were added to quizlet (conduction, convection and radiation). Astronomy test date moved to Friday January 19th. The Kahoot review will occur both before school at 7:30 - 8:00 am and after school on Thursday the 18th.

Wednesday Jan 10th: Students completed our discussion of heat transfer at the end of our Pear Deck. We introduced the terms conduction, convection and radiation as methods of energy transfer. We modeled how energy moves through solids and fluids (liquids and gases) then labelled the movement of energy when molecules are touching as conduction. When molecules change location as a result of having more energy, we identified this as an example of convection. The final question in PearDeck was about the movement of energy from the Sun to the Earth, student identified this as the result of radiation, which requires no molecules, since space is mostly empty space, neither conduction or convection could be the reason that energy from the Sun makes it to Earth. Students received the PearDeck back as two assignments (Part I and Part II) to make corrections in the notes section. We also started a worksheet to identify property of the planets through GC. This was homework as well. We will use this in class tomorrow.

Thursday Jan 11th: We discussed the planets in our solar system and identified the inner four planets as rock planet and the outer four as gas giants. We also looked at the temperature and noticed that Venus was hotter than Mercury which is closer to the sun. Some students shared that Venus has a thick atmosphere rich in greenhouse gases (CO₂, Methane, etc..) and that this keeps much of the heat it receives from the Sun from escaping. We talked about the 75-76 year orbit of Haley's comet around the Sun. We discussed the speed of the comet as it approaches the Sun and how it changes as it leaves the part of its orbit where it is close to the Sun. We also introduced the terms of asteroids, meteors and comets. See Quizlet for these new terms.

Friday Jan 12th: Students reviewed the order of the planets, the special properties of Venus and how we can group the first four and the second four planets in our solar system. We also discussed the 9th planet in our solar system "Planet 9" briefly. On my website I have posted several astronomy related resources, one of which we watched together "The Universe", where students gained a perspective of our Universe. Students recorded in their notes: Universe>galaxy>solar system>sun>planet>moon.