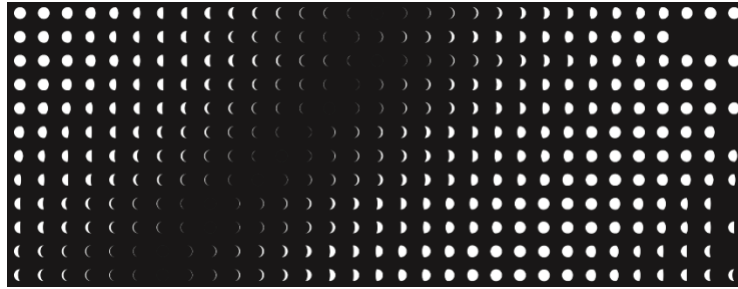




Pō Mahina (moon phases) and Light Energy



Before break, we were learning about the Hawaiian moon phases, and the mele Pō Mahina or moon phase song. We also learned how those moon phases affect planting and fishing, due to the moon's gravity on earth. We learned that the phases that we see are not actually the moon changing shape, they are the parts of the moon that are visible to our eyes based on light that shines upon it. But the moon doesn't actually have its own light. We can see the moon and its phases because of the light from the sun. Most of the things that we see are visible because of the light from the sun. The light from the sun transfers to the moon, which allows us to see parts of it, depending on the position of the moon and earth.

Watch this video to see how light transfers from the sun to the moon to create moon phases:

<https://www.generationgenius.com/videolessons/moon-phases-video-for-kids/>

Try this moon phase demonstration activity. You will need a source of light. If you do not have a lamp as shown in the video, use a flashlight. Have an 'ohana member hold the flashlight in place to represent the sun. Your head will represent the earth, which will spin as you slowly spin around. You can use any type of ball, even a basketball, and you can hold it out with your hand instead of putting it on a stick. You will also need a dark room. Watch this video and try it out. Improvise with what you have at home!

<https://www.youtube.com/watch?v=wz01pTvuMa0>

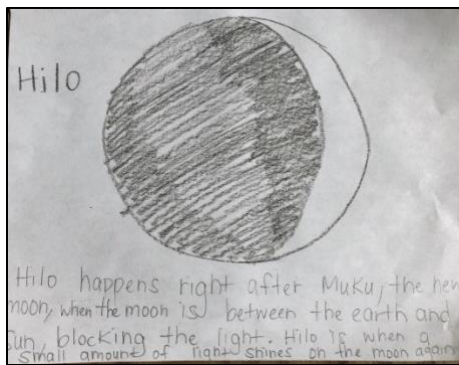




After watching the videos, you should have some idea about how moon phases are created from the light of the sun transferring to the moon. It is easiest to explain why we see the new moon (Muku) and full moon. (Mahealani) Draw and label Muku or Mahealani. Below your drawing, explain how the sun creates this moon phase including where the moon and earth are during this phase. (you can go back and watch the videos if you forget) Take a picture of your drawing and email it to your homeroom teacher to post on the 4th grade website.

http://www.kamehamehapublishing.org/_assets/publishing/multimedia/apps/mooncalendar/index.html

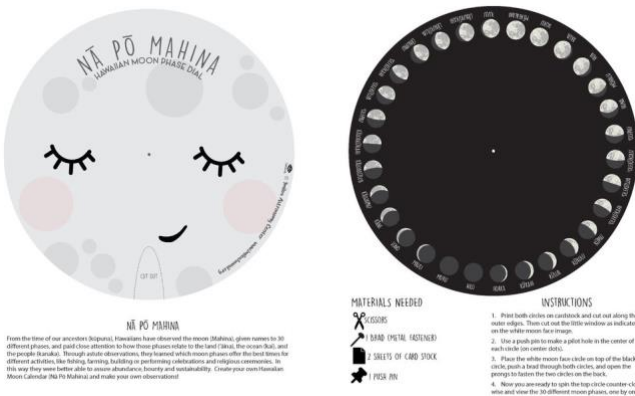
Here's an example: (I chose a more difficult moon phase to describe)



For fun:

Create your own Pō Mahina dial through this Imiloa website:

<https://imiloahawaii.org/mahina>



Practice the Mele Pō Mahina that we learned from Kamehameha Schools Middle School students:

<https://sites.google.com/imua.ksbe.edu/ksbioblitz/resources?authuser=0>



ALSO,

Just go outside and kilo (observe) the moon and see if you can identify the phase that it is in by looking at the [Hawaiian Moon Calendar](#) link above. You can also take pictures and send them to your teacher.