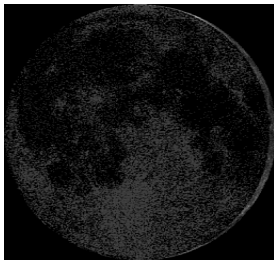


Veronica Schneider: Moon-Phase Journal over a 6 week consecutive period

Friday, February 4, 2011:

Tonight (7:00pm), when I searched for the moon I realized that I could not see it. At first, I attributed the absence of the moon to the numerous clouds in the night sky; however, I then realized it may have recently been a new moon, or when the moon is positioned in between the sun and the Earth. I researched online and discovered that a new moon did indeed occur recently, on February second, and therefore, only 0.043 of the moon was illuminated. The reason I could not see the moon is due to the fact that such a small, insignificant sliver of the moon was illuminated. The moon is currently waxing, or more of the moon is being illuminated, with each passing night. Therefore, I will be able to see the illuminated moon soon enough. The moon is gaining light from the sun in a direction from right to left.



Saturday, February 5, 2011:

The moon was, again, hardly visible tonight (7:00pm), but I could see a sliver of illuminated light. This is due to the fact that only 0.089 of the moon was illuminated. However, I could see the non-illuminated (the current majority) part of the moon in an area of the sky lacking any clouds. It was a beautiful sight. When we examine the moon in the sky some nights, it is easy to simply just see the illuminated section of the moon, and not the remaining. Therefore, it was interesting to see a non-illuminated moon in the sky. The moon will continue to gain more illumination with each passing night from right to left (waxing).



Sunday, February 6, 2011:

Tonight, (7:00pm) the amount of illumination of the moon did increase in size; however, it was still extremely difficult to see the difference from last night's moon. The illuminated fraction of the moon tonight was 0.149, and therefore, with cloud cover it was hard to see this illuminated fraction of the moon. The small increase in illumination from the previous night to tonight's moon is not significant enough to visibly notice with the naked eye. However, I could see more of the non-illuminated portion of the moon compared to the night before; therefore, it is obvious that the moon is gaining more illumination from the sun.



Monday, February 7, 2011:

Tonight (7:00pm), the moon was certainly much more noticeably illuminated. (0.221 fraction of the moon was illuminated) I could easily see the moon in tonight's sky, and it is increasingly gaining light in the direction from right to left (waxing). It is taking on the shape of a crescent moon, although i do not believe it is fully a crescent moon as of yet. Perhaps tomorrow it will be a genuine crescent moon. As many of us know, we only see one side of the moon throughout its twenty-nine day cycle from one full moon to the next because this is the amount of time it takes the moon to rotate once on its axis. Due to the moon only rotating once as it revolves around the Earth, we see only one side of the moon from Earth. In about three days, the moon will be at first quarter (half of the moon will be illuminated).



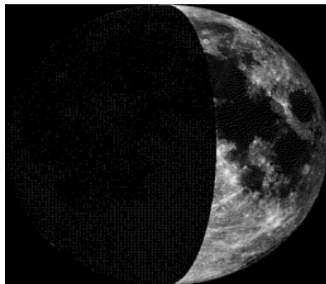
Tuesday, February 8, 2011:

The moon is so beautiful to look at tonight, and it is especially visible in Beacon (7:00pm) with no clouds in the sky. The fraction of the moon illuminated is 0.303, and it is in the shape of a crescent, or a crescent moon (waxing crescent)! When turned on its side with the crescent moon facing upward, the crescent moon resembles a smile! The moon will soon be half illuminated (about two days), or the first quarter moon.



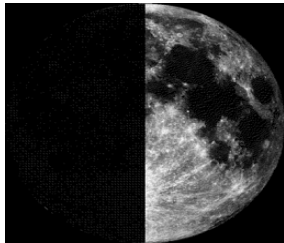
Wednesday, February 9 2011:

The moon tonight (7:00pm) is much larger tonight, and it is illuminated fraction of 0.394. It appears to have greatly increased in size (illumination). It is about one day until the first quarter, and it is almost half illuminated. It is a very beautiful sight.



Thursday, February 10 2011:

Tonight (7:00pm), the moon is a half moon! It is very big, bright, and beautiful! This is the first quarter phase of the moon. It is illuminated a fraction of 0.491. It reminds me of a black and white cookie- it is half illuminated on the right and dark on the left. You can see many more of the craters on the moon. The earth would resemble the moon's surface being covered in craters from past impacts, but because of the earth's plate tectonics, which are plates continuously moving on the surface of the earth, the surface is always being refined and shaped. Therefore, the impacts are "erased" from these moving plates.



Friday, February 11 2011:

The moon is no longer a half moon, but is more than half illuminated (waxing gibbous). The moon is illuminated a fraction of 0.591. The moon's craters are even more visible before. I began thinking about how the moon was formed, and remember learning about the theory that the moon was formed from an impact of a good size that hit the earth many years ago and the debris that was produced formed the moon.



Saturday, February 12, 2011:

The moon will soon be a full moon! It is illuminated a fraction of 0.691. When the moon is illuminated 1.00, it will be a full moon.



Sunday, February 13, 2011:

Wow! The moon is truly getting much bigger each night! Now the moon is so bright and easily noticeable from anywhere. It is beautiful to look at. It is illuminated a fraction of 0.786. It is a waxing gibbous, and 78% of the moon is illuminated.



Monday, February 14, 2011:

Happy Valentine's Day! Such a beautiful moon on Valentine's day, as well. It has increased in size (illumination) from last night. It is now illuminated a fraction of 0.870 (85% of the moon is full). I can see many more of the moon's craters now, and it is probably about 3 or four days until the full moon.



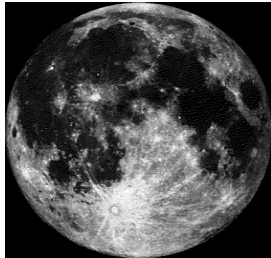
Tuesday, February 15 2011:

The moon is certainly very, very bright tonight and almost appears to be full; however, it is only 94% full, a fraction of 0.938 of the moon is illuminated. There should be a full moon in 2 days.



Wednesday, February 16 2011:

The moon is even bigger tonight- although it is certainly more difficult to notice any changes in size and growth. The moon is now illuminated a fraction of 0.982, and is 98% full; therefore, the moon is only 2% not illuminated.



Thursday, February 17 2011:

Happy full moon! Wow, the moon is so big and full, and it is illuminated 100%! The night sky is a little cloudy, however, the moon is reflecting so much light that it is still very clear. In addition, I could even see the moon clearly in the sky during the day, today. The Earth is presently in between the sun and the moon, creating this "full moon" appearance and illumination. You can truly see the complete "man in the moon." It is fascinating to think about how the craters in the moon, which take the shape of a face ("man in the moon "), were formed by impacts over thousands of years ago. When the moon is full it also makes one think about how the one side of the moon, the side with the face, is the only side we ever see. The "dark side of the moon" is so mysterious, and scientists only know about it from landing on the moon and collecting rocks and satellites. After tonight, the moon will begin to decrease in the amount of illuminated light reflected on its surface from the sun, and will enter the "waning" phases until eventually we have reached a new moon again.



Friday, February 18, 2011:

Today, the moon has begun to lose the amount of light that is reflected on its surface; however, it is not obvious or noticeable yet. The moon still appears to be a full moon, and is very bright in the night sky. This is because it has not been long since the full moon. The moon is presently in the waning gibbous phase, and is illuminated about 98%. The moon will now progress in the various stages in a backwards manner- losing light instead of gaining light.



Saturday, February 19, 2011:

Today, the moon's decreasing illumination is slightly more noticeable-the moon will now become dark on the right and remain illuminated on the left until there is a new moon. The moon is still a waning gibbous, and is only about 95% illuminated.



Sunday, February 20, 2011:

Tonight, I could easily see the waning moon, and its decrease in illumination on the right. Tonight, the moon is only illuminated about 90%. It makes one think about how the moon is actually moving around the earth as the earth rotates. It's fascinating! What would the sky look like without the moon? It would look so empty! I'm glad the Earth has the moon to illuminate the night sky. Some planets are not so lucky!



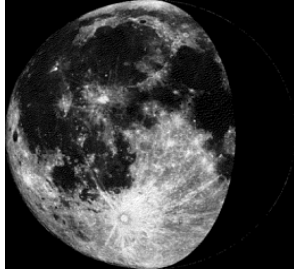
Monday, February 21, 2011:

The moon is significantly less illuminated tonight. It is now much darker on the right side (waning), and is only about 81% illuminated. I was thinking about how the moon is losing illumination throughout the day as well, and this isn't simply a change that occurs at night when we can see the moon more clearly. People don't usually pay much attention to the moon during the day. There is only about three more days left until the moon reaches the third quarter (or half moon), except this time the moon will be half illuminated on the left and not the right.



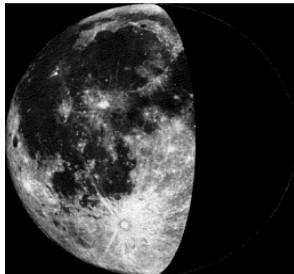
Tuesday, February 22, 2011:

The moon is disappearing before our very eyes! Tonight, the moon is less illuminated and had lost even more reflected light from right side. If anyone looks into the sky it is very obvious that the moon is no longer full or near full anymore. The moon is about 71% illuminated. Probably only about two more days until the third quarter (waning)!



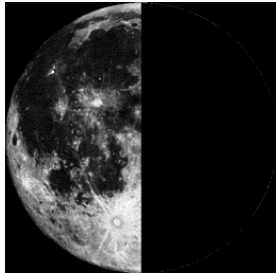
Wednesday, February 23, 2011:

The moon is almost a third quarter moon, but it is still rounded and not split directly in half down the middle yet. It is beginning to look like a black and white cookie! The moon is about 61% illuminated.



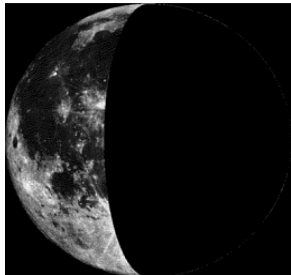
Thursday, February 24, 2011:

The moon is now at third quarter. It is illuminated on the left, and dark on the right. This is opposite of the first quarter moon. The moon is 50% illuminated tonight. It truly resembles a black and white cookie now!



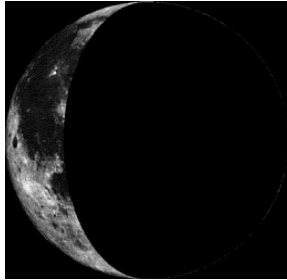
Friday, February 25, 2011:

The moon has lost even more light tonight, although it is hard to see it because it is so cloudy and rainy tonight. The moon is about 40% illuminated on the left and is dark on the right. It will soon be a waning crescent moon.



Saturday, February 26, 2011:

The moon is a beautiful waning crescent moon! This is the image of the moon (waning crescent) often used in children's stories and rhymes, such as the familiar phrase, "the cow jumped over the moon." The moon is about 32% illuminated.



Sunday, February 27, 2011:

The moon is still a waning crescent moon, but it has lost even more illumination. It is about 20% illuminated now. The majority of the moon is dark on the right.



Monday, February 28, 2011:

The moon is really difficult to see tonight because of the cloudy, rainy sky! It is even smaller in size tonight (still a waning crescent), or less illuminated. Soon it will be a new moon, and the moon will be completely covered by the Earth, blocking the sun from illuminating the moon. The moon is about 13% illuminated tonight.



Tuesday, March 1, 2011:

The moon is almost a new moon! The moon is still a waning crescent moon. The moon is about 7% illuminated. The moon just looks like a sliver now.



Wednesday, March 2, 2011:

The moon is hardly illuminated now! It is difficult to see the sliver of illumination. The moon is only about 3% illuminated and is still a waning crescent. There is only about 1 more day until a new moon, in which the moon will be 0% illuminated since the Earth is directly between the sun and the moon- blocking the sun's ray from reaching the moon.



Thursday, March 3, 2011:

A new moon! The moon is no longer visible, as the Earth is directly between the sun and the Earth- blocking the sun's rays. It is fascinating how I have watched the moon change from a new moon to a waxing moon to a waning moon and to a new moon again. Now, the cycle will repeat again.



Friday, March 4, 2011:

The moon is not visible tonight still. It is still a new moon.



Saturday, March 5, 2011:

The moon is now waxing again! (gaining light from right to left) It is only about 1% illuminated, however, so it is hard to see. There is a small sliver of light developing on the right.



Sunday, March 6, 2011:

The moon is slightly larger tonight, but it is difficult to see because it has been raining all day and it is very cloudy outside. The moon is about 4% illuminated. It is waxing!



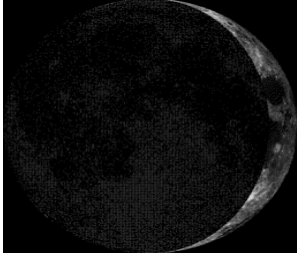
Monday, March 7, 2011:

The moon appears like to look like a smile tonight and is a waxing crescent! It is about 10 % illuminated.
The waxing crescent certainly resembles a smile.



Tuesday, March 8, 2011:

The moon does not appear much different from last night. It still is a waxing crescent. It is illuminated about 15%.



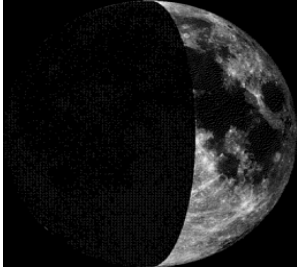
Wednesday, March 9, 2011:

The moon is still a waxing crescent moon, but it is definitely more illuminated now. It is about 22% illuminated, or full, tonight.



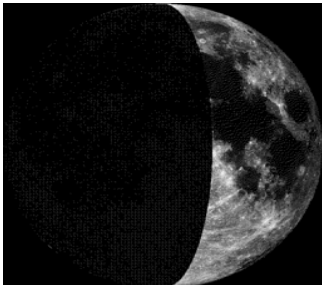
Thursday, March 10, 2011:

The waxing crescent is now about 30% illuminated tonight, and appears bigger (growing!) from my position. It is almost the first quarter (half moon), though! About two more days until a half-moon is seen.



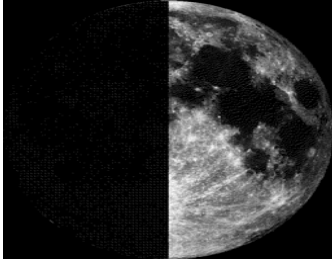
Friday, March 11, 2011:

The moon is almost a half moon! It is about 40% full, so only 10% more illumination is needed to make the moon a first quarter moon! It is becoming brighter!



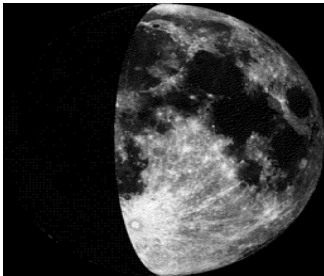
Saturday, March 12, 2011:

Tonight the moon is a half moon, or first quarter moon! It is 50% illuminated, and looks like a black and white cookie! More craters are visible and easy to see now. The next day it will be a waxing gibbous.



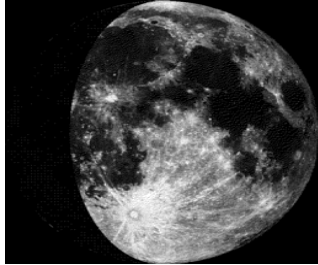
Sunday, March 13, 2011:

The moon is now a waxing gibbous, and is about 60% full. It is even brighter in the sky tonight!



Monday, March 14, 2011:

The moon is certainly getting larger! It is now about 70% full. It increases in illumination about 10 % each day. It is still a waxing gibbous.



Tuesday, March 15, 2011:

The moon is about 80% full tonight! About three more days till a full moon!



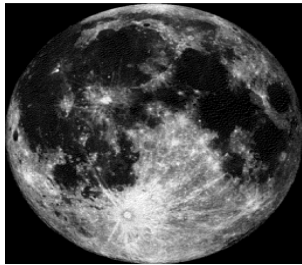
Wednesday, March 16, 2011:

The moon is about 90% full tonight, and is still increasing (waxing) in illumination to the left. It is very bright in the cloudy night sky; only a sliver of the moon on the left is not illuminated. Tomorrow or the day after should be a full moon!



Thursday, March 17, 2011:

The moon is almost full! The moon does have about 4% not illuminated, and therefore, about 96% is illuminated. The moon will be a full moon within the next 24 hours.



Friday, March 18, 2011:

Almost a full moon tonight! It is very bright in the sky, and very clear. It is 96% full! The moon should be a full moon tomorrow and very large.



Saturday March 19, 2011:

The full moon seen tonight is certainly very special. Tonight, the moon is bigger than it has been in 18 years. The moon closer to Earth than that it has been in more than 18 years, the biggest full moon of 2011, will leading some observers calling it a "supermoon." On Saturday afternoon at 3 p.m., the moon arrived at its closest point to the Earth in 2011: a distance of 221,565 miles (356,575 kilometers) away. A supermoon is a full or new moon that coincides with a close approach by the Moon to the Earth. The Moon's distance varies each month between approximately 357,000 kilometers (222,000 mi) and 406,000 kilometers (252,000 mi) due to its elliptical orbit around Earth. Now, the moon will begin to enter the waning cycle, or loose illumination from the right to the left.

