



#### Supplies:

- 4 dessert-sized PAPER plates (the cheap ones) per student
- A sheet of black bulletin paper, approximately 24" X 64" per student
- 1 bottle of black tempera paint
- 1 gallon of bubble solution
- Bottle of Kayro Syrup
- White colored pencil- one per student
- Craft glue sticks- one per student
- Scissors
- Bowl for every 4 students
- Straws (two per student)

#### Additional supplies for SPED modifications:

- Labels for phases
- Glue sticks
- Scissors

#### Key Vocabulary:

- Waxing increasing
- Waning decreasing
- Waxing Crescent the phase where the Moon is crescent in shape and the crescent is increasing in size
- First Quarter Moon the phase where half of the lit portion of the Moon is visible after the waxing crescent phase
- Waxing Gibbous Moon the phase when more than half of the lit portion of the Moon can be seen and the shape is increasing in size
- Full moon this is the phase when we can see the entire lit portion of the Moon
- Waning Gibbous Moon the phase when *more than half of the lit portion* of the Moon can be seen and the shape is *decreasing in size*
- Third Quarter Moon the phase when half of the lit portion of the moon is visible after the waning gibbous phase
- Waning Crescent the phase when the Moon is *crescent in shape* and the crescent is *decreasing in size*
- New Moon the phase where the *Moon cannot be seen* because we are looking at the *unlit side* of the Moon





In order to prepare for this activity, you will need to mix the "Moon Making Mixture" by adding 2 cups of Kayro Syrup and 4 tablespoons of black paint to every gallon of bubble solution. Mix very well- ensuring that the paint and syrup are not settled to the bottom. Divide the solution into bowls so that every 3 students have a bowl of about 2 cups of solution inside it. Complete this before your students arrive in the classroom.



Divide your class into groups of 3. Assign one student to be the supplies person and direct them to get 3 sheets of black paper, 6 straws, and 12 paper plates for their group. Instruct them to pass out two straws per person and cut a small slit in the end of ONE straw (about a half inch long) by placing the tips of the scissors into the straw. Once this is complete, the students take that part of the straw and put it into the other uncut straw making a "SUPER STRAW". This usually works without taping that area, but, if need be, that's fine.



Next, model for the students how to create the craters of the moon using the dark bubble solution. Hold the plate while blowing bubbles at the bottom of the bowl. Once large bubbles start to bulge out of the top of the bowl, the students use the plate to scoop the bubbles from the top covering the plate with the bubbles. Setting the plate aside to pop and dry, the students continue the bubble scooping process with all 4 plates. Taking turns, one student blows the bubbles with their straw. The second student scoops. The third student takes the filled plate and puts it down to dry. Each student scoops all 4 plates before switching, so the straws don't become an issue. Instruct the students to try to scoop from the very top taking only the large bubbles, as the tiny ones make the plates super wet.











Complete this part before electives (PE, Music, Recess, Computers, etc.) to allow a little more drying time. If it is not before electives, read a moon phases book or show a short video. These do not need to dry fully. However, if they are really wet, they rip when trying to cut them.

#### \*TIP\*

I bought a class set of old McDonalds trays at a yard sale, and I use them all the time. They are perfect for this, because you can use expo markers to write the students' names on the tray, and then they can place the drying moons in each tray as they move on.



#### \*TIP\*

Metal straws would be amazing for this activity, because they can be easily cleaned and are reusable.

While the plates are drying, the students should write their names on one side of the black paper using the white colored pencil and copy down the key vocabulary words/definitions on the back, Then the students flip over the paper, so their names and definitions are on the back.









Once the plates have sufficiently dried, the students will fold their black paper in half matching the short ends together (hamburger style), crease, and then open up again. They need to lay it flat, so that the long side is going left to right (landscape style). Then, your students pick out their favorite moon plate creation- the one they think would make an amazing full moon. The students glue it on the crease leaving about three finger spaces below for labeling.





Taking another moon, the students fold it in half. Using a regular pencil, the students draw a crescent shape from one folded tip to the other. This should be first modeled by the teacher. Then, the students OPEN the plate and cut the crescent out along the curve they made. The students repeat this one more time with another plate. This should give them two crescents and two gibbous shapes.





Using one of the crescents, the students glue it at the edge so that the lit portion is facing the full moon and the dark side is facing outside of the poster. The students repeat this step in the same manner with the other crescent on the opposite side.

Taking the gibbous moons, the students cut away the crescent shape and glue the gibbous shape just outside the full moon, leaving a space between the gibbous and crescent moons so the lit portion is facing the full moon (the uncut part of the plate is facing the full moon).





Once they glue the gibbous phases down, the students fold their final moon in half, open it back up, and then cut down the center crease. This creates two quarter moons, which the students glue down (one between each of the gibbous and crescent moons) with the lit side facing the full moon, once more.



Finally, the students label the phases and the poster! In the space below each moon phase, the students write the name of that phase using their white colored pencil. For my second graders, I pull an image up on the smartboard for them to copy down. For my 3rd and 4th graders, they use their amazing thinking brains to recall the phases. The pencil does erase when mistakes are made. At the top, the students write MOON PHASES in their best bubble or block letters. In my classroom, we like to draw craters inside the two "O's" to carry over the theme.

\*TIP\*
If the students write the phases themselves, the activity can be used as an assessment!

