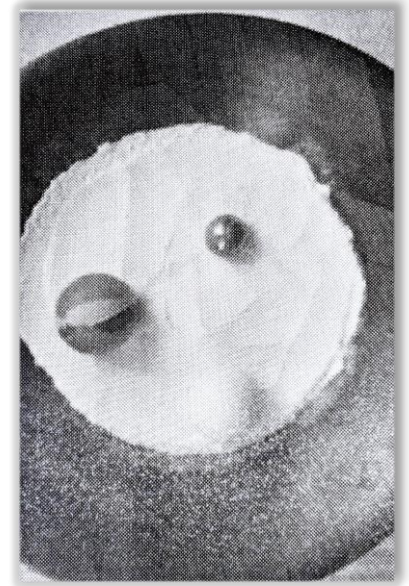


## Experiment title: Crater Science

### Grades: Kindergarten- 3<sup>rd</sup> grade

Early on in school student learn to identify the sun, moon stars, and planets. They often look at pictures of the moon and hear about how “craters” have formed on both the moon and Earth. So what is a crater and how does it form?

Research: You will want to investigate how craters are formed and why does it happen? This is where you will form your hypothesis on which type of object will create the biggest crater.



#### Materials list:

- Wide mixing bowl
- Flour
- Ping-Pong ball
- Super Ball
- Marble
- Yard stick
- Small pebble

#### Procedure:

1. Take your mixing bowl and fill it half full of flour. Run your hand across the top of the flour so that it is flat and even. This experiment represents the dusty surface of the moon and you will test your hypothesis.
2. Lay out the ping pong ball, super ball, marble and small pebble. You can organize them in two different ways. First size then weight. (Make sure that you write this information down as it will become the information in your graphs.)
3. Take the yard stick, hold it upright and measure one foot high. Drop each item from that height into different spots in the flour.
4. Gently pull each item out of the flour and take notes of your observation on a piece of paper, (you can also take a picture to later include in your display.) Which one made the biggest puff of flour? Which one went the deepest? Which one left the widest crater?
5. Make sure to repeat the experiment 3 times to have an accurate result.
6. Think about what happened does the size make a difference in the crater or does the weight make more of an impact? Your thoughts on this subject will become part of your conclusion.
7. Convert your notes into your tables and graphs.