Jet Propulsion Laboratory

## Measuring the Supermoon

## Measuring the Size of the Moon

1. Make note of where the full Moon is in the sky. You can use stationary objects (buildings, trees, power poles, etc.) to find its relative location, or measure the Moon's location using altitude (vertical position) and azimuth (horizontal position). You can also create this Moon Phase Calculator to find the approximate location in the sky.
2. Line up the edge of the paper with the edge of the clipboard or cardboard and clip or tape the paper down securely.
3. With the paper secured, place or hold the paper a measured distance (one to two feet) from your face so that you can see the Moon and the paper. Make note of this distance.
4. Line up the edge of the paper with the Moon.
5. Mark lines on the paper that match where the top and bottom of the Moon intersect the paper. Measure the distance between the lines in millimeters and write it down.

6. Repeat this procedure during multiple successive full moons, while the Moon is in the same approximate spot in the sky (recorded in Step 1), placing the paper at the same distance from your face each time.

| Date of Full Moon <br> Observation | Moon Size (in mm) | Notes (location, time, etc.) |
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1. What is the largest diameter measured?
2. What is the smallest diameter measured?
3. What is the ratio between the largest diameter measured and the smallest diameter measured?
4. What percentage increase is there between the smallest diameter measured and the largest diameter measured?
