

π IN THE SKY⁴

You don't have to be a NASA rocket scientist to measure the size of the moon's shadow during a total solar eclipse. All you need is a little pi!

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jpl.nasa.gov/edu/nasapidaychallenge

EPIC ECLIPSE

When sunlight hits the moon, a cone-shaped shadow is created. During the total solar eclipse on August 21, 2017, the distance from the center of the moon to the center of Earth will be 372,027 km. On that day, if the moon's shadow were not intersected by the surface of Earth, it would extend 377,700 km from the moon to its vertex.

Viewers on Earth who want to witness the eclipse will have to be at a location inside this shadow as it passes over Earth to see the eclipse at totality. **What is the approximate surface area of Earth that will be covered by the disc of the moon's shadow at any one time during the eclipse?**

LEARN MORE ABOUT THE ECLIPSE
eclipse2017.nasa.gov

