

## Praxis “Making Science Fun”

### Full Moon Facts?

Why does the full moon appear so much larger when it is low in the sky? Some evenings the Moon looks huge when you first notice it low on the horizon yet later on when it is high overhead it doesn't look as big. Our next full moon will be on Tuesday February 7<sup>th</sup> and weather permitting, you can try this experiment.



### Materials:

- Sheet of Paper
- Tape

**Procedure:** (Remember to be sure to have your parent's permission and they have the time to watch and help you.)

- At dusk locate the moon when it is low in the night sky. It appears quite large.
- Roll up your paper into a tube and use it to look at the moon.
- Make the roll larger or smaller until the moon completely fills the opening in the tube. Use a piece of tape to hold the tube's size (diameter).
- A couple times later in the evening and again when the moon is high in the sky, use the tube to look at the moon
- When the moon gets higher in the night sky, does it look smaller than it did earlier in the evening?
- Use the tube to look at the moon. Does the moon still fill the tube?

### What's happening?

When viewed at long distances things appear much larger than when viewed at closer distances. This apparent change in size can also be observed with terrestrial objects, such as mountains or tall buildings. Scientists are unsure what causes this, but it is obviously related to how the brain interprets images of large, distant objects viewed near the horizon.

### Extension:

Read more:

[http://wiki.answers.com/Q/Why\\_does\\_the\\_moon\\_appear\\_to\\_be\\_bigger\\_on\\_the\\_horizon\\_than\\_in\\_the\\_sky#ixzz1Kp75NAC](http://wiki.answers.com/Q/Why_does_the_moon_appear_to_be_bigger_on_the_horizon_than_in_the_sky#ixzz1Kp75NAC)

Note: There are times during the year when the Full moon is larger because it is closer to the Earth (at perigee the moon is 46 958 km closer). [http://www.fourmilab.ch/earthview/moon\\_ap\\_per.html](http://www.fourmilab.ch/earthview/moon_ap_per.html)

This experiment is based on our “Astronomy and Sky Science” Learning Kit. Our teaching kits (described on our website) are loaned out FREE to provide classroom teachers and parents of home schooled children as an opportunity to explore Science in interesting ways. Please consider volunteering as one of our classroom speakers or allow your business as a field trip location.



On January 30<sup>th</sup>, Praxis held Operation Minerva, a conference for grade 9 girls (<http://www.medicinehatnews.com/local-news/grade-9-girls-get-more-than-just-a-career-day-01312012.html>). It promoted Science, Technology, Engineering and Mathematical (STEM) based careers where young ladies job shadowed mentors and attended workshops. We wish to thanks SD76, the Medicine Hat News and the many volunteers, business and organization that made this possible. See our website for pictures and details. If you are a business or organization who wish to support this conference or Operation Thoth, our male equivalent scheduled for April 20<sup>th</sup>, please contact us.

Lorne Cooper, Regional Executive Director

PRAXIS, “Making Science Fun”. Contact Praxis at [praxis@praxismh.ca](mailto:praxis@praxismh.ca), [www.praxismh.ca](http://www.praxismh.ca), Tweet or follow us @PraxisMedHat, or friend us on Facebook. Address: c/o 200 7<sup>th</sup> Street S.W., Medicine Hat, AB, T1A 4K1 Phone: 403-527-5365, Fax: 403-527-6570.