Earth Science

February 20-21, 2008 Eclipse of the Moon

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Explain!_

Each of the circles below represents the disk of the Moon at a particular time during the evening of 2/20/2008. Your job is to go outside and observe the Moon at each of the times shown, and draw the Moon as it appears to you. Stand facing the Moon and draw carefully. The right (or west) side of the Moon as you view it is on the right of the circles below, and the left (or east) side of the Moon is on the left of the circles below.

At 9:20, and again at 11:30, use the arc of the shadow on the Moon to estimate the size of the full shadow of Earth and sketch it in the space around the Moon. The diagram to the right illustrates how to do that (notice that there's extra space around the Moons, though it's OK if your circle overlaps the text or another circle).

...as a guide to draw the rest of the shadow here

Use the shadow here...

Then answer the following questions:

- 1. In what direction did the shadow move across the Moon? _____
- 2. In what direction did the Moon move through the shadow?
- 3. Was the Moon centered in the umbra, or was it a little above or little below the center of the umbra? _____
- 4. Advanced: Relative to where the eclipse occurred, where was the descending node of the Moon's orbit? _____

