Our Corner of the Universe
AST 101, Fall 2007
Lunar Phases II Lab
Week of September 4
Astronomy, pp. 12-14

Material: Flashlight, white ball.

Procedure: Each group will simulate the motion of the Moon around the Earth, in order to understand the relationship between the phases of the Moon and its appearance in the night sky. Remember that the Earth rotates on its axis and the Moon revolves around the Earth **counterclockwise**. As you act out the motion of the Moon and the rotation of the Earth answer the following questions and hand them in at the end of the lab.

1. What time of day (as measured by the passage of the sun across the sky, i.e. dawn, noon, sunset, etc.) does the new Moon rise?

2. At sunset you notice the Moon is directly overhead. What is its phase? (Draw a sketch.)

3. What time of day does the full Moon rise?

4. You wake up during the night and see the left half of the Moon lit and the Moon halfway across the sky from east to west. What time is it?

5. Why does the Moon rise about an hour later each night?