In Class Worksheet (Lunar Phase Simulator)

1. Sketch the shadows for Sun-Earth-Moon Geometry shown below. Then sketch the appearance of the moon as seen from the earth and notate the name of the phase.

   Sun-Earth-Moon Geometry

   ![Sun-Earth-Moon Geometry Diagram]

   Moon’s Appearance

   ![Moon’s Appearance Diagram]

   Name of Phase: ________________

2. Sketch the appearance of the moon and notate the name of the phase for the new geometry below.

   Sun-Earth-Moon Geometry

   ![New Sun-Earth-Moon Geometry Diagram]

   Moon’s Appearance

   ![New Moon’s Appearance Diagram]

   Name of Phase: ________________

3. Complete both drawings for the position and appearance of the moon 3 days later than part #2.

   Sun-Earth-Moon Geometry

   ![3 Days Later Sun-Earth-Moon Geometry Diagram]

   Moon’s Appearance

   ![3 Days Later Moon’s Appearance Diagram]

   Name of Phase: ________________
4. Draw in the location of the sun and moon in the horizon diagram for the earth-moon geometry shown.

5. Draw locations of the moon and observer in the Earth-Moon Geometry diagram and the locations of the sun and moon in the horizon diagram 6 hours later than part #4.

6. Estimate the angle between the sun and moon in part #5.

   Angle = _________________________