

Name: _____

NetID: _____

Date of Session: _____

"Virtual Observing" Session at Staerkel Planetarium

Purpose: To learn about the Celestial Sphere and the apparent motions of celestial objects as observed from Champaign-Urbana and other parts of the world.

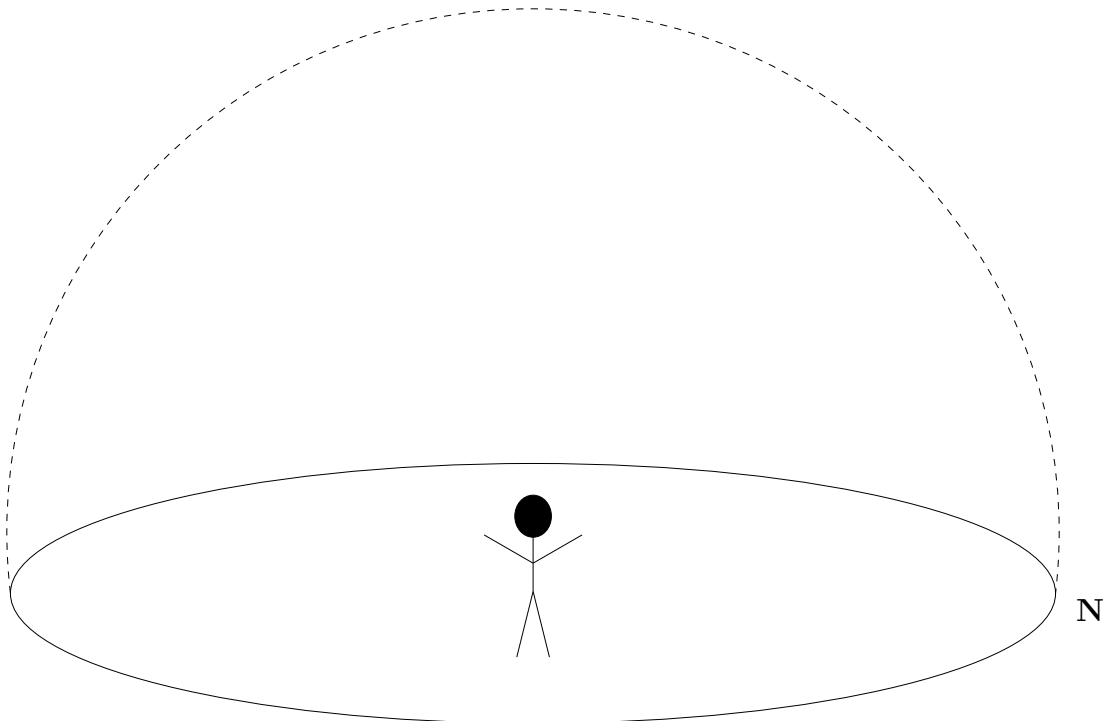
What to do? Attend the "Virtual Observing" Session at Staerkel Planetarium and answer the questions below.

Staple the planetarium ticket to this report.

1. Celestial Sphere.

Draw a celestial sphere for an observer in Champaign-Urbana (latitude of 40° N) using the figure below. Mark the following points and great circles on your drawing:

- (a) zenith, horizon, the cardinal directions (N,S,E,W) on the horizon plane;
- (b) north celestial pole, celestial equator, and celestial meridian
- (c) the north star - Polaris
- (d) mark the region where you see circumpolar stars



2. On which great circle are the zodiac constellations located? On which great circle would you find the apparent location of the Sun?
3. From Champaign-Urbana, is it possible to see stars in the southern celestial hemisphere? Briefly explain.
4. Where on Earth can one see the largest fraction of the celestial sphere over the course of a year. What is this fraction?
5. Write a short (1/2 to 1 pages typed) report describing what you learned at the planetarium show and staple it to this form. Accuracy and writing quality count.