Observing the Sky: What to Put in Your Head!

I. The Celestial Sphere

A. Constellations: Field Guide Ch. 4
- Origin and organization, asterisms
- Constellation names, abbreviations, genitives
  for UMa, UMi, Boö, CBg, Her, Sag, Lyr, Cyg, Aql
  (FG pp. 512-513) - be able to pick them out:
- Star names ("other" and Bayer designation)
  Know how to find them!

B. Coordinate systems: Nights, October 8-24,
   Field Guide Ch. 15
- horizon - horizon, zenith, nadir, meridian, etc.
  "An object at an azimuth of 135° and altitude of 30° is
  a) in the northeastern sky
  b) in the southeastern sky
  a) in the northwestern sky
  b) in the southwestern sky"
- celestial - RA, Dec, NCP, SCP, CE
  Definition, constellation, date
  Solstices & Equinoxes
  - Sub-solar latitude,
  - horizon-celestial connection:
   observer's latitude and
   altitude of celestial pole
   altitude of celestial equator

C. Motions in the sky
- daily motion Cycles pp. 1-10
  stars, sun, moon, planets, comets, etc. circle NCP once per day
  solar time, clock time, sidereal time - definitions & differences
- annual motion Cycles pp. 20-32
  equinoxes and solstices: definitions, right ascensions, declinations, constellations, dates
  the sun's motion along the ecliptic, and in declination (the analemma), the Zodiac
  sidereal and solar day and the analemma
- motion and phases of the moon Cycles pp. 11-19
  phases, elongations, times of rising, transit, and setting (MOON WORKSHEET!!)