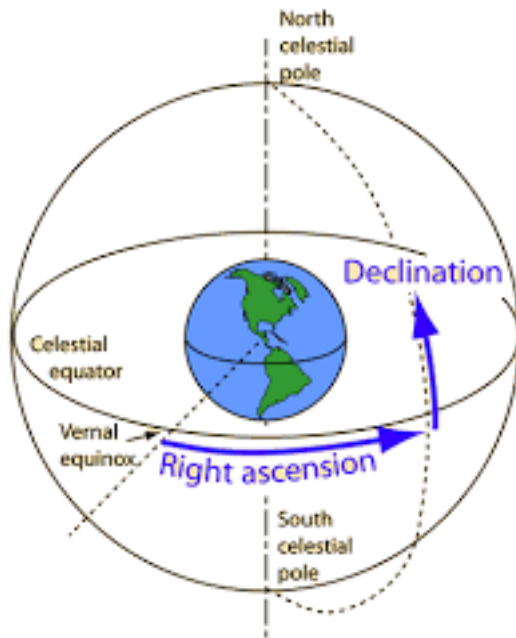


Unit 1: Worksheet 3 - Celestial Coordinates

I. RIGHT ASCENSION AND DECLINATION

A way to locate a point on the sky is to use its right ascension and declination:



DECLINATION (Dec or d): Measures the angle **north** or **south** of the celestial equator $\pm 0^\circ$ to 90°

North is positive declination and South is negative declination

Celestial Latitude ... parallels of declination

DEGREES, ARCMINUTES, ARCSECONDS:

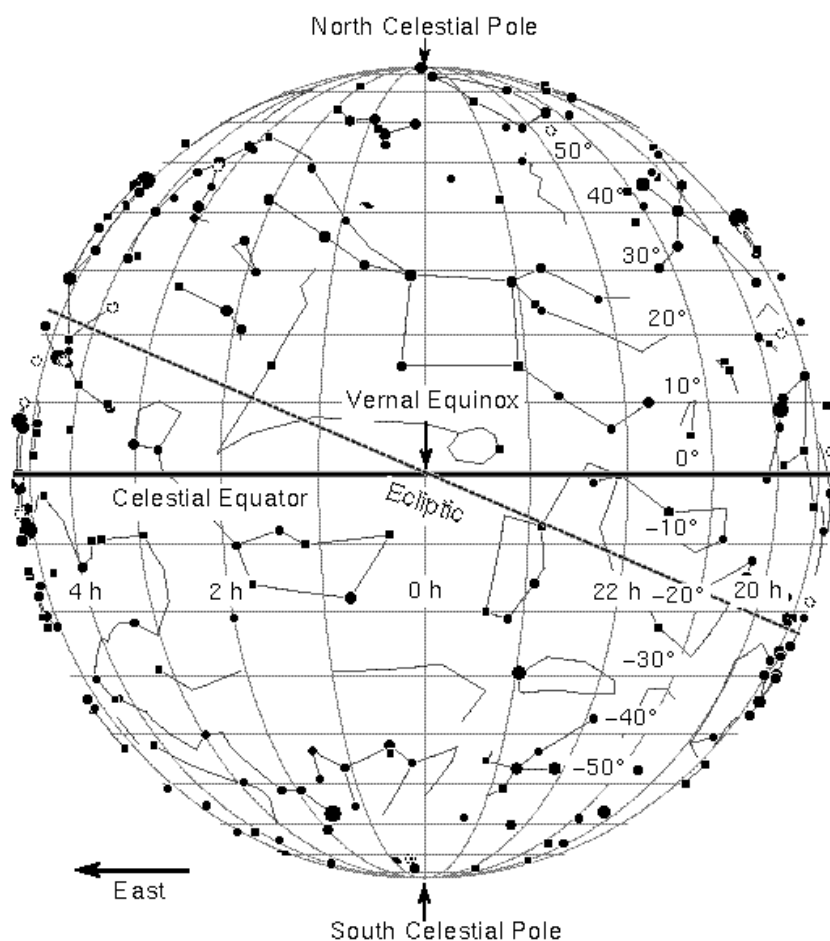
$0^\circ 0' 0''$ to $90^\circ 0' 0''$

RIGHT ASCENSION (RA or a): Measures the angle east of the prime meridian from 0h to 24h

Celestial Longitude ... great circles of right ascension

HOURS, MINUTES, SECONDS:

0h 0m 0s to 23h 59m 59s



On the chart use colored pencils to highlight and label the

- lines of 0_h, 6_h, 12_h and 18_h
- circles of 0° , $+20^\circ$, $+50^\circ$, -20° , and -50° .

In what constellation is the point 23_h, $+20^\circ$? (Hint: Ancient astronomers thought it resembled a horse.)