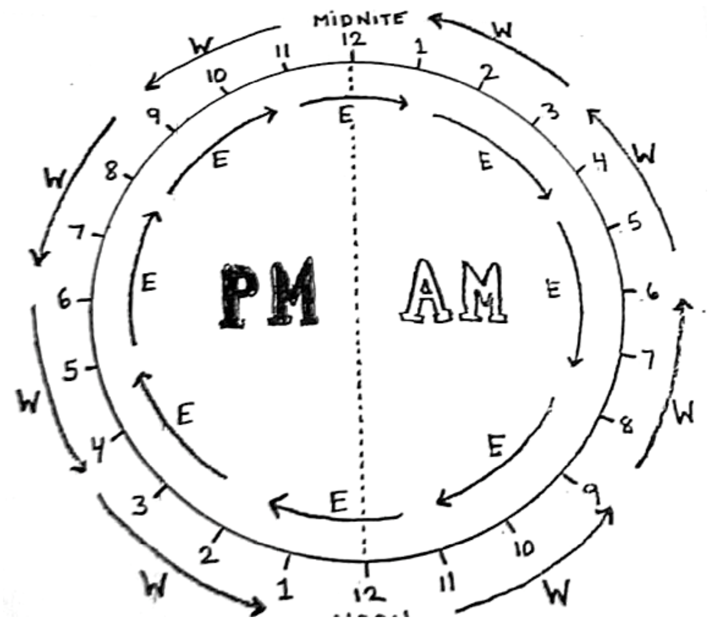
ERHS Science | Longitude & Latitude | Name:______________________per_____
Marine Science | Date:_________________

Directions: Use the Longitude Circle provided to fill in the chart. Remember: 1 hour = 15° so 4 min = 1°
If I can see Polaris I am in what hemisphere:_______ If I see Sigma Octantis I am in what hemisphere:____
Write in the longitude, latitude, and location of each example below. The location will be the nearest location that someone could walk on.

STEPS TO USE THE LONGITUDE CIRCLE:

1. Find the time at Greenwich, England (GMT) on the circle.
2. Find the local time (LT) on the circle also.
3. Go **from** GMT to local time around the circle taking the **shortest** route possible. (Determine the # of hours and minutes and use the 1 hr=15°, or 4 min = 1° to determine the total degrees).
4. The direction you go tells you whether longitude is east (E) or west (W).

Ex: GMT=2:40pm LT=8:10am
Difference is 6hrs 30 min
Start @ 2:40 pm go to 8:10 am so go ccw or WEST.
1 hr = 15° so 6 hrs = 90° & a half hr is 7.5°
This is 90° + 7.5° = **97.5° W**



Noon

Fill in the Latitude, Longitude, & Location in the chart:

Problem #	GMT	Local Time	Sigma Octantis	Polaris	Latitude	Longitude	Location
1.	2 PM	10 AM	50 °				
2.	6:35 PM	6:55 PM		60°			
3.	3:30 AM	2:30 PM	65°				
4.	9:17 PM	7:17 AM		75°			
5.	7:12 PM	4:52 PM	5°				
6.	2:46 AM	2:46 PM		30°			
7.	12:37 AM	8:37 PM	66°				