Name:		
Lab #	-	

Date:		
Period	 	

Internet Lab Title: The Sun's Path

Pre-Lab: Define the following definitions

Azimu			
Altituc	le:		
List the	e dates of the 4 Seasons, (month & day):		
Winter	r =, Spring =, Summ	ner =	_, Fall =
Read a	nd Answer Section		
1.	How many times larger is the Sun than the Earth?		
2. 3.	How many days are there in a year to the nearest hundredth of a How long does it take for the Earth to rotate 360*? hour	day? s, minutes,	seconds
<u>Animat</u>	tion Activity Section		
1.	Use the up, down, right, and left arrow keys to view differen	t positions of the appare	nt motion of the Sun.
2.	Double click on the Azimuth button, what area of the sphere	does the Azimuth repre	sent?

3. Double click on the Altitude button, what does the altitude represent?

Next, use the arrow keys under the animated sphere.

4. Using the dates shown on the data table fill the missing data and calculate daylight and nighttime hours.

Time	Lat	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct.	Nov.	Dec.
Noon	45*	21	21	21	21	21	21	21	21	21	21	21	21
Sun Set													
Sun Rise			1										
Day Light hr.													
Night													
Time, hr													

- 5. What date has the shortest amount of daylight hours? 6. What date has the longest amount of daylight hours?
- 7. What dates have equal daylight and nighttime hours?
- 8. Which month(s) would you expect to the longest shadow at Noontime?
- 9. Which month(s) would you expect to see the shortest shadow at Noontime?

10. At the bottom of the website, double click on "The Sunpath Users Guide" and define the following.

Solar time:

Solar declination:

11. Go back to the main page of the website, and double click on "The Solar Irradiation" and define Solar constant.

Solar constant:

Hugick Page 2 4/20/02

Direct link to the Sun's Path URL: http://www.anu.edu.au/engn/solar/Sun/SunPath/SunPath.html