## - THExp 2

- Autumn Equinox is Sun, March 20 Spring Break!
- At 1PM, need to go outside and do the measurement

- $h$ is height of object, $L$ is length of shadow.


## - What to do

- What do $L$ and $h$ tell you about your Latitude?

- Latitude angle $A=\operatorname{Tan}^{-1}(\mathrm{~L} / \mathrm{h})$. Use Degrees!
- So, how big is the Earth?
- A proportionality will help:


$$
\begin{aligned}
\frac{A}{360^{\circ}} & =\frac{2350 \text { miles }}{C} \\
C & =2 \pi R
\end{aligned}
$$

- Find C, then find R, and report results: THExp \#2.

