

Light and Latitudes - Seasons Across the Continents

(from a lesson plan found at SkyTellers/<http://www.lpi.usra.edu/education/skytellers/seasons/activities/light.shtml>)

Materials

- Graph paper
- Colored pencils
- Annual data tables of daylight hours for unidentified cities

Safety Concerns: None.

Procedure

1. Look at your copy of the handout *Daylight Hours Across the Globe*. Select two of the unknown cities.
2. As you make your graph (make a ***line graph***; be sure each city is identified and graphed in a different color), number of daylight hours in your city for each month of the year on their graph.
3. After completing your graph, answer the questions on the back of the graph paper.

Student Name(s)

H
O
U
R
S

O
F

D
A
Y
L
I
G
H
T

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Month

1. Which seasons have more daylight hours? (identify months and seasons!)

2. Which seasons have fewer daylight hours? (identify months and seasons!)

3. How does this compare with the time of year the seasons occur here in Utah?

4. Based on the data, is your city in the Northern or Southern Hemisphere? How do you know?

Daylight Hours Across the Globe

Time is indicated as number of hours (h) and number of minutes (m)

| City | 1-Jan | 1-Feb | 1-Mar | 1-Apr | 1-May | 1-Jun | 1-Jul | 1-Aug | 1-Sep | 1-Oct | 1-Nov | 1-Dec |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| A | 10h 34m | 11h 00m | 12h 18m | 12h 25m | 13h 07m | 14h 18m | 14h 24m | 14h 00m | 12h 40m | 12h 35m | 11h 11m | 11h 20m |
| B | 14h 31m | 13h 22m | 13h 20m | 12h 29m | 11h 04m | 11h 11m | 11h 05m | 11h 29m | 11h 32m | 12h 20m | 13h 49m | 14h 24m |
| C | 12h 12m | 12h 10m | 12h 08m | 12h 06m | 12h 04m | 12h 03m | 12h 03m | 12h 04m | 12h 05m | 12h 07m | 12h 09m | 12h 09m |
| D | 17h 32m | 15h 27m | 13h 33m | 11h 22m | 10h 03m | 8h 32m | 8h 17m | 9h 27m | 11h 22m | 12h 46m | 14h 53m | 16h 33m |
| E | 4h 53m | 7h 02m | 10h 03m | 13h 35m | 17h 36m | 21h 17m | 22h 09m | 18h 04m | 15h 16m | 11h 19m | 8h 36m | 5h 31m |
| F | 12h 04m | 12h 04m | 12h 05m | 12h 07m | 12h 50m | 12h 51m | 12h 11m | 12h 10m | 12h 08m | 12h 06m | 12h 04m | 12h 03m |
| G | 15h 03m | 13h 45m | 13h 20m | 12h 24m | 11h 26m | 10h 03m | 10h 36m | 11h 07m | 11h 23m | 12h 24m | 14h 08m | 14h 14m |
| H | 9h 12m | 10h 15m | 11h 04m | 13h 31m | 15h 18m | 15h 42m | 16h 34m | 15h 36m | 13h 22m | 11h 41m | 10h 39m | 9h 24m |
| I | 24h 00m | 24h 00m | 19h 01m | 14h 40m | 0h 00m | 0h 00m | 0h 00m | 0h 00m | 7h 14m | 15h 14m | 24h 00m | 24h 00m |



FLUMP

12-22

