Daylight Data Collection Observations and Analysis Teacher Guide

These are suggested ideas or questions to encourage your students' analysis of the data you've gathered throughout the year.

This process will take multiple days.

- Look at each graph/chart separately. Ask students to share what they notice on the chart. Prompt them to look for days with the most daylight vs days with the least amount of daylight. Record these ideas on a class chart.
- Compare several months/charts and the student observations from those. Think about the same ideas (what they notice; most daylight/least daylight; months with more daylight/months with least daylight) and record these ideas.
- Students should begin to generalize ideas about relative hours of daylight throughout the year:
    - Summer months have more daylight hours & usually warmer temperatures
    - Winter months have less daylight hours & usually cooler temperatures
    - Specific months will have the greatest/least amount of daylight hours
    - Notice the gradual change of daylight hours - increasing or decreasing
    - Patterns of sunrise and sunset are connected to number of daylight hours and change throughout the year
    - Seasonal patterns are connected to number of daylight hours and change throughout the year
    - Patterns of the motion of the sun can be observed, described and predicted
- Students should make predictions and draw conclusions based on the observations and descriptions your class made. Examples could include:
    - Will we have more/less sunlight next month? How do you know?
    - How do I know what season will be next?
    - If I want to plan a trip, how could I use this information to make decisions about where to go, when to go, how to pack, etc.?