

## Data Integration

### Indian Hills Sunrise/Sunset Times

<https://sunrisesunset.willyweather.com/co/jefferson-county/indian-hills.html>

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### Lesson Enhancement

I chose to use sunrise and sunset data for the town in which the school is located, Indian Hills, Colorado from the website Willy Weather. I found a great website that gives us the day by day data for the sunrise and sunset. We are able to look at all of the days of the year so that we have ample data to use. I will probably assign different months to different groups of students so that they are working on the same concept, but presenting a different month of the year. I teach elapsed time in math and this information is an authentic way for use to look at how long the days are and how the day length changes.

### Statement About My Personal Feelings Using Data

I love using data within the classroom. We collect data for science and math. In math, we work on elapsed time, and collecting general data in order to read graphs and work on tally marks. I feel it helps the students see information in a different way and helps them link concepts visually. In science we collect data for our force and motion unit, our weather unit, and our animal adaptations unit. I do feel that data collection and interpretation is a strength area in my teaching.

### Interdisciplinary Context

I especially love that data can link math to science/social studies. Students are able to easily see how a scientist would need to know math in order to understand or explain a phenomenon in science.. In this particular unit. I will connect the collection of the sunrise and sunset data with the changing seasons in order to enhance our understanding of what causes the seasons to change. We will then look at the relationship between the changing seasons data and the connection between why humans and animals adapt because of the changes. Once we have an understanding of how the weather and changing daylight times affects people, we can create a brochure for tourists which helps them make good decisions when visiting our town during different times of the year. Students can create graphs showing the typical fluctuations in daylight and temperature and overlay them to show how they correlate. During our investigation of the weather, we will look into changing technology that allows us to collect data and create our own anemometer using recycled materials.