

## **Common Writing Assignment: Science**

Science and Technology/Engineering

# Why are there seasons?

Boston experiences drastic changes in temperature over the course of a year. In the winter, the average temperature in Boston is around 36°F. In the summer, it increases to 82°F. Using the data tables below as well as data that you have collected in class, write a paper explaining why there are seasons.



#### Distance between the Sun and Earth

Date	Earth's distance from the Sun (km)	
January 3	147,000,000	
July 4	152,000,000	

## **Hours of Daylight by Month**

Date	Hours of daylight in Boston
January 21	9 h 36 min
February 21	10 h 51 min
March 21	12 h 13 min
April 21	13 h 40 min
May 21	12 h 48 min
June 21	15 h 17 min
July 21	14 h 48 min
August 21	13 h 37 min
September 21	12 h 11 min
October 21	10 h 47 min
November 21	9 h 34 min
December 21	9 h 5 min

#### Solar Angle by Month

(90° would be directly overhead)

Date	Angle of Sun in the sky
January 21	27.7°
February 21	37.1°
March 21	48.2°
April 21	59.8°
May 21	68.0°
June 21	71.1°
July 21	67.9°
August 21	59.5°
September 21	48.0°
October 21	36.7°
November 21	27.6°
December 21	24.2°

### Don't Forget to...

Plan your writing using an outline, web or graphic organizer. As you write each draft of your assignment, it's important to use what you know as a writer to communicate your ideas effectively.

- ✓ Provide a clear <u>claim</u> that answers the question.
- ✓ Include evidence -- using data from class activities, experiments and other resources.
- ✓ Include <u>reasoning</u> to show how your evidence supports your claim.
- ✓ Use vocabulary that you have learned in science class.
- ✓ Check for grammar, punctuation, and spelling errors.