

Temperature Trends

Purpose

Students will use computer spreadsheets in analysis of data and in the calculation of mean and median. Students will also locate information using reference books, CDROMs, and/or computer databases as they investigate climate trends in Antarctica.

Materials

For the teachers: none

For the students: almanacs, computers with Internet access, word processing software and spreadsheet software.

Activity

A. Pre-Activity Preparation

1. Locate several almanacs for use in looking up climate information.
2. Locate websites (computer databases) for students to use in looking up climate information.

B. Pre-Activity Discussion

1. Review mean and median with students. (Mean: the average obtained by adding the values and dividing by the number of values. Median: the value that divides a set of data, written in order of size, into two equal parts.)
2. Discuss global warming trends with students.
3. Show students almanacs and websites (computer databases) where they will locate information for their spreadsheet.

C. Description of Activity

1. Divide students into groups of 2.
2. Using almanacs and the predetermined websites, students will research the mean and median of temperatures in Antarctica between the years 1955 to 1995. If necessary, students will use a spreadsheet to calculate the mean and median.
3. Using the information on the web, students will record the mean and median temperature for each year onto a spreadsheet.
4. Students will use a word processing program to describe their findings of the warming trend over the last 40 years. Students will also discuss future implications of the continued trend in their document.

Technology Literacy Standards

	I	II	III	IV	V	VI	VII
1	X			X			
2	X					X	
3				X			
4	X						
5		X					
6				X			
7							
8							
9							
10						X	
11				X			
12							
13						X	
14						X	
15							
16							

= This Technology Literacy Standard is addressed in this lesson.

= This Technology Literacy Standard is not addressed in this lesson.

Classroom Assessment

Students will submit their printed spreadsheet and word processing document for evaluation.