



Temperature Comparisons (Here and There) Lannon and Mitchells Plain

Goal

Students will understand the temperature differences at the same time of year through graphing the temperatures in Lannon, WI and Mitchells Plain, SA.

Objectives

Upon completion of these lessons, students will be able to:

1. Plot temperature data points on a line graph.
2. Compare temperatures using information from the line graph.
3. Explain reasons for the difference in temperature.

Subject Areas

Science, Math

WI Standards

Math: E.4.1, E.4.3, B.4.1, B.4.5, A.4.1, A.4.3

Science: E.4.5, E.4.6, C.4.5

Materials Needed

Posterboard graph, individual student graphs, thermometers, calculators, markers, pencils
overhead projector and supplies

Introduction

Students will be starting this lesson in February during our science unit on weather. They will have already learned how to read a standard thermometer and how to convert temperatures in degrees Fahrenheit to degrees Celcius. The compilation of temperatures onto the line graph will take place either weekly or at the end of the month, depending on communication between classrooms.

Lesson Procedure

1. On the overhead, create a data table of the temperatures over the past month. Using the temperatures collected, students can use calculators to convert the data to degrees Celcius.
2. Model how to plot points on the line graph using the temperature graph on the posterboard. Have individual students come up to plot points.
3. Hand out individual student graphs and have students work in partners to create a line graph similar to the one created in class.
4. Use data from South Africa to create another line graph. Plot some points on the class poster as a model for students, and then have them complete their chart on their own.
5. Discuss temperature differences and how the tilt of the earth affects the seasons in different hemispheres. Model for the students how to use the information on the graph to calculate temperature differences on a specific day.

Assessment Ideas

- 🌐 Collect individual line graphs to check for accuracy and understanding.
- 🌐 Have students complete an exit slip at the end of the activity – tell the temperatures in WI and SA for one day and calculate the temperature difference, along with a reasoning.

Adaptations

- 🌐 Create all line graphs as a group
- 🌐 Solve temperature differences in partners
- 🌐 Extend knowledge by converting SA temperatures to Fahrenheit and graphing, then compare shape of line graphs