Activity 2
Where is it Hot or Cold?
Level 1

Materials: large teaching thermometer, map of the United States.

Objective: Students will be able to access a web site that will allow them to understand temperature readings and patterns across the United States.

National Science Education Standard: As a result of their activities in grades K-4, all students should develop an understanding of: Properties of earth materials, objects in the sky, changes in earth and sky. Weather changes from day to day and over the seasons. Weather can be described by measurable quantities, such as temperature, wind direction and speed, and precipitation.

Engage:
Ask students what they know about the different kinds of weather in the United States. Where in our country does it usually stay warm all year? What part of our country usually has cold temperatures and snowstorms in the winter? Where can you find warm weather in the winter?

Explore:
At the activity website, http://www.uni.edu/storm/activities/level1, click on “Where is it Hot or Cold?” Access the Current US temperature map. Display the map or print off copies for students to study. What parts of the USA are hot? Warm? Cool? Cold? Ask how the students determined their answers.

Explain:
Display a map of the United States and point out the states Texas, California, Minnesota, Ohio, New York and Maine. If you wish, you may have the students try to identify specific cities (or the capitals) within the states and try to find those cities on the map instead of just the state. You might ask students if they know the two-letter postal codes for the states (Texas = TX, California = CA, Minnesota = MN, Ohio = OH, New York = NY, and Maine = ME). Hand out the attached ‘Thermometers’ worksheet, which lists these six states with a thermometer below each state’s name. The teacher will demonstrate finding the temperature for the state of New York and recording the temperature on the worksheet. Students will then find and record the temperature for the remaining states on the worksheet.

Extend:
Use the current temperature map from above to color in a map of the United States (below). In areas where it is warm color it red, where it is cold color it blue.

Evaluation:
The teacher will circulate through the classroom to observe whether or not the students are able to understand and find the appropriate information. Collect all student worksheets.

For Further Inquiry: Ask students: “How do cold areas and warm areas around the country change during the week?” Tell them to design an activity to answer this question or any other question they might have about areas of warm and cold temperatures.