# Hottest, Coldest, Highest, Deepest

# Summary

This activity helps students learn about Utah weather.

# Materials

- Hottest, Coldest, Highest, Deepest , by Steve Jenkins
- Weather extremes data (pdf)

A science journal

Additional Resources

There are videos available on weather through district media centers. <u>DK Vision</u> has a video called *Eyewitness Weather* that is good.

# Books

- Hottest, Coldest, Highest, Deepest
  - , by Steve Jenkins; ISBN 0395899990
- Utah's Weather Guide
  - , by Dan Pope and Clayton Brough. 1997 News4Utah
- Can It Rain Cats and Dogs?
- , by Melvin and Gilda Berger (Scholastic); ISBN 0-439-08573-X
- The Wind Blew
  - , by Pat Hutchins (Scholastic); ISBN 0-590-46632-1
- Looking At Clouds
  - , by Susan Ring (Newbridge); ISBN 1-58273-027-X
- Cloudy With a Chance of Meatballs
  - , by Judith Barrett (Scholastic); ISBN 0-590-30384-8
- Magic School Bus-Inside A Hurricane
  - , by Joana Cole (Scholastic); ISBN 0-590-44687-8
- Weather Words
- , by Gail Gibbons (Scholastic); ISBN 0-590-44408-5
- Weather
- , by ValerieWyatt (Kids Can Press); ISBN 1-55074-815-7
- The Tornado Desk
- , by Jacalyn S. Leavitt (Talon Printing)

## Background for Teachers

The state of Utah is unique in the type of landforms that people come from all over the world to see. There are the mountain regions in the north, the breathtaking canyons in the south, the deserts in the west, and the plateau regions to the east. Utah's position on Earth (where we are relative to the ocean and equator) combine with the landscape to provide a variety of weather and climate patterns. Our climate also varies extremely throughout the state on any given day. One person may be golfing in sunny St. George while another person is skiing at Park City on the same day.

It is important to be able to compare the temperature, rainfall, and other data of different locations throughout the state. Discuss why these variations exist.

Information can be found through reference books and the Internet to make comparisons of weather data in Utah and other places in the world.

## Intended Learning Outcomes

3. Understand Science Concepts and Principles

4. Communicate Effectively Using Science Language and Reasoning

#### Instructional Procedures

Invitation to Learn

What do you think are the coldest and hottest places in Utah? What is the coldest or hottest place in the world? How cold or hot do you think it gets?

## Instructional Procedures

Students make a K-W-L chart in their journal.

Have students list the highest, coldest, hottest, rainiest, and driest places in the world that they know of in the "K" section.

Ask them to write some questions they would like answered in the "W" section that relate to Utah (e.g., What is the coldest place in Utah?).

Read the book Hottest, Coldest, Highest, Deepest aloud.

Have students list what they learned in the "L" section of the chart.

Share data about weather records for the state of Utah (see *Records for Utah Weather Extremes*). Additional information is available in reference books or the Internet. List records of

temperature, wind speed, precipitation, etc.

Have them fill in the "L" section with what they learned about Utah's weather in general and their area in particular.

## Extensions

Students may also look up information about another state or country (such as Japan) to see what weather extremes they experience.

Have students write and illustrate their own book about extremes in weather, landforms, elevation, etc. from what they learn about another location.

Have students record the temperature each day for a week to see what the highest and lowest temperatures are at the school.

It may be necessary to have students sit up close to see the pictures in the book.

Students can work in groups to complete the K-W-L activity sheet.

Family Connections

Keep track of the weather elements at home for several weeks. Record the highest, lowest temperatures, rainfall, etc.

Share the book Hottest, Coldest, Highest, Deepest and the K-W-L chart with family members. Watch the local weather forecast on television or find it in the newspaper. Look for the highest and lowest temperatures for the state and country.

## Assessment Plan

Use the K-W-L chart for assessment purposes.

Assign the learners to create their own illustrated book.

Give a written quiz with multiple choice or fill-ins where students list the hottest, coldest, etc., places.

#### Authors

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