



3.1 WEATHER

OBJECTIVES

The students

- Begin their collection of local weather data.
- Invent logos to represent local weather conditions.
- Record daily observations of general weather conditions.
- Connect the study of weather to their Pacific Island environment.

CLIMATE EDUCATION FRAMEWORK

- 3-5Weather.A.1 By measuring weather conditions (temperature, amount and kind of precipitation, amount and kinds of clouds, wind direction and wind speed), scientists learn how the weather changes from day to day, month to month, and during the year.

BACKGROUND

This activity builds on the study of general weather begun in earlier grades. It is used to introduce students to the study of weather and climate. The concept maps provide the teacher with some information about their students' prior knowledge about weather.

The teacher determines an appropriate weather data collection device and format for the class. The class data can be recorded on a daily weather calendar, on a monthly weather chart, in a weather notebook, or however the teacher decides. The student pages can be used to record the collected weather data in a class weather book or individually by each student. It is recommended that a specific place be set aside as a class Weather Center. Weather related charts and graphs, weather measurement equipment, and the data collected should be stored here.

For students new to DASH, this activity provides an opportunity to introduce several DASH components including concept mapping and the Responsibility Chart. For further information about these components see Appendix A, *DASH Components*.

STUDENT ROLE

Meteorologist

MATERIALS

Class Weather Calendar, Chart, or Data Book
 chart paper
 markers
 Working Dictionary
 Sp 3.1 Daily Weather

PRODUCTS

Concept maps about weather
Class weather logos chart
Weather data
Working definition of weather

PROCEDURES**1. Have the students work in small groups to make concept maps about weather.**

Have them

- Include different kinds of weather, tools used to measure weather, and any other ideas they have about weather.
- Share their group concept maps and then revise and add to them as they choose.
 - ✓ Help them to also include weather elements such as temperature, wind, types of precipitation, clouds, and storms.
 - ✓ Include humidity *only* if suggested by the students.

2. Have the students invent logos to describe different kinds of local weather conditions.

Have them

- Make a list of common kinds of weather found locally such as clear or sunny, cloudy, partly cloudy, rainy, partly rainy, stormy, windless, windy, lightning, hail, foggy, etc.
- Discuss the idea of using logos to represent the kind of weather.
 - ✓ Logos are simple drawings used to represent something. For example, a sun could be used for sunny days. Show some common samples such as a figure of a man to represent the men's restroom, to help student understand the idea of a logo.
- Draw logos for the different kinds of weather.
- Make a Class Weather Logos Chart.

3. Introduce the Weather Center and post the Weather Logo Chart in the center. Introduce the students to the teacher-selected weather data recording device.

4. Have the students observe the weather each day and draw the appropriate logo for the weather data recording device. Use SP 3.1 Daily Weather as desired.

Discuss the data collection by asking such questions as

- When should you make your observations about the general weather conditions for the day?
- When should you record your observation of the weather type, at the end, middle, or beginning of the day? Why?
 - ✓Help the students see that to appropriately describe the weather for the entire day, this should be done near the end of the school day.
- Who will do the observing and recording?
 - ✓Introduce the Class Responsibility Chart. See Appendix A.

5. Have the students create a first working definition for weather and record it in the Working Dictionary. See Appendices A, B, and C for further information on working definitions.

6. At the end of each month have the students summarize their weather data. See Activity 3.6 Monthly Weather Summary.

EXTENSIONS

- Record student questions about the weather in the Wonder and Discover Book as they arise.
- Have the students develop their own questions and investigations about general weather conditions.
- Have the students compare their weather observations with newspaper, Internet, or TV descriptions.

Ask such questions as these

- How do your descriptions about the weather compare with the observations of the newspaper meteorologist, the TV weather reporter, or Internet accounts?
- Why are there differences?
- The local weather will often differ widely from the broader generalization given by newspapers, the Internet, and TV.
- Do you need to change the way you are reporting the weather?



**DAILY
WEATHER
SP 3.1**

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Date: _____

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