

Island of the Blue Dolphins, Chapter 10
Weather and Climate

Grade Level

Upper Elementary: Third Grade through Fifth Grade

Subject

Literacy and Language Arts, Science, Social Studies

Common Core Standards

4.SL.1

Next Generation Science Standards

3-ESS2-1

Background Information

In chapter 10, Karana experiences a winter storm by herself for the first time. Because ships rarely travel in the winter, the storm makes her realize that she will be alone on the island until spring. This realization makes her extraordinarily lonely, so she decides to take a canoe in search of the rest of her village members. She starts off bravely, but the strenuous journey—coupled with a crack in her canoe—forces Karana to turn back. Throughout this chapter, Karana pays close attention to the weather.

This activity is designed engage students in data analysis as they, too, pay close attention to the weather. Students will study data they find online and create charts comparing the climates on San Nicolas Island and their own communities.

Small group cooperative learning: Students work together in groups of three to six to complete a task. Each student is responsible for a different element of the task, and students work together to create a single, final project on which they will all be assessed.

Materials

- Computers with Internet access
- Website for your local weather
- Copy of activity sheet for each student (provided)
- Graph paper or computer workstations for each group
- Miscellaneous project supplies, such as poster board, markers, glue sticks, scissors, etc.
- Class set of *Island of the Blue Dolphins*

Procedure

1. Give students a copy of the activity sheet and provide them with graph paper or a computer for digital graphing.
2. Go over the directions and answer any questions.

3. Show students the website(s) that you would like them to use and model how to navigate those sites.
 - A good website for San Nicolas Island weather is <https://weatherspark.com/averages/31068/San-Nicholas-Island-California-United-States>
4. Divide students into groups.
5. Give students a deadline to complete assignment and give them time to work.
6. Once students have completed the publishing step, have a class discussion about their answers to the questions listed in Step Two of the activity sheet.
7. To shorten this activity: Divide students into groups and assign each group just one season to research.
8. To lengthen this activity: Before students present, pair small groups together and allow them to compare their results. AND/OR Have students work together to create a museum of their projects, and give them additional time to explore each other's work.

Enrichment Activities

Research prompt: San Nicolas has a relatively temperate climate (without extremely hot or extremely cold temperatures). What is the climate like where you live? Research factors that influence climate.

Name _____

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Directions: For this activity, you will use data to compare the climate where you live to the climate on San Nicolas Island, which is Karana's home. You will gather information about rainfall, average high and low temperatures, and wind speeds for each season in each location. We'll use these definitions for the four seasons.

Seasons:

- Winter: December, January, February
- Spring: March, April, May
- Summer: June, July, August
- Fall: September, October, November

Step One: As a group, decide who will be responsible for each task on the list below. Use the websites that your teacher selects to gather information.

Task List:

1. Use the information on the websites to determine and record the
 - a. "**average temperature** for each season for your area and San Nicolas Island.
 - b. "**average high temperature** for each season for your area and San Nicolas Island.
 - c. "**average low temperature** for each season for your area and San Nicolas Island.
 - d. "**average rainfall** for each season for your area and San Nicolas Island.
 - e. "**average wind speed** for each season for your area and San Nicolas Island.
2. Create a bar or line graph comparing the
 - a. "**average temperature** for each season for your area and San Nicolas Island.
 - b. "**average high temperature** for each season for your area and San Nicolas Island.
 - c. "**average low temperature** for each season for your area and San Nicolas Island.
 - d. "**average rainfall** for each season for your area and San Nicolas Island.
 - e. "**average wind speed** for each season for your area and San Nicolas Island.

Step Two: Work together to answer the questions below. Be sure to write at least one paragraph in response to each prompt and include the answers in your publication (Step Three).

1. Did Scott O'Dell get it right? Do the seasons as Karana describes them match up to the data you collected?
2. Compare your climate to Karana's climate. Where do you think it would be easier to survive totally alone, without your family, friends, and neighbors? Why?

Step Three: Decide how your group would like to publish your findings. Be creative! For example, you may create a booklet, poster, travel brochure, PowerPoint, or set of 3D models.

Step Four: Prepare to discuss your answers to the questions in Step Two with the rest of the class.