

Island of the Blue Dolphins, Chapter 2
Comparing Karana's World to My World

Grade Level

Upper Elementary: Third Grade through Fifth Grade

Subject

Literacy and Language Arts, Math, Science

Common Core Standards

4.RI.7, 4.W.7, 4.MD.A.2

Next Generation Science Standards

4-ESS2-2

Background Information

While the descriptions in chapter 2 attempt to illustrate the size of San Nicolas Island (SNI), large-scale geographical visualizations are quite difficult for students at the elementary level without some help. This activity allows students to compare maps of SNI with maps of more familiar places like their home states and towns so that they can better understand the relative size of SNI.

MAPfrappe is an interactive online tool designed to help people visualize scale and proportion using map comparisons. The teacher and/or the students will be able to draw an outline around SNI and drag the outline around the map to compare sizes. They should compare SNI to at least one location that is larger and to one location that is smaller, for example, their home state, town, and school. Other suggestions to consider include Disney World, the Grand Canyon, and Hawaii.

Materials

- Copy of activity sheet for each student (provided)
- Internet access to MAPfrappe.com
- Class set of *Island of the Blue Dolphins*

Procedure

1. Give each student a copy of the activity sheet.
2. Using a computer or iPad, students should go to MAPfrappe.com. On the first map they should outline San Nicolas Island (SNI) by dragging their mouse around the map of the island. Click on the top Reference map to draw an outline. Each click makes a new segment of the outline. Click on Close Outline or End Outline to finish the outline.
3. Model how to draw an outline on the map for the class. The SNI outline will appear on the Comparison map and can be dragged around for comparison. You will need to greatly enlarge the Comparison map to see the SNI outline in the middle of the United States. Click with the mouse and drag the outline for a comparison. (Example: <http://mapfrappe.com/?show=42790>)

4. Instruct students to compare SNI to locations both larger and smaller than it.
5. Discuss student findings as a class. Be sure to talk about which places are smaller and which are larger than SNI, and by what extent.
6. Teachers can also use premade MAPfrappe comparisons and the dimensions of SNI to make comparisons and further explain the scale to the students.
7. Students should continue to play with the maps until everyone has a good sense of how big the island is.
8. To shorten this activity: Use this interactive web tool as a whole-class demonstration. On the screen, compare the size of SNI to that of the state and town in which your school is located, and have a class discussion about the comparisons.
9. To lengthen this activity: Have students compare the population size for each of their locations and, with help, calculate population density. Students could also conduct research to find topographical maps of SNI and one or more of their other locations. They can use these maps to compare physical features in each place.

Enrichment Activities

1. Have students create a poster to show how a location of their choice and SNI differ in size.
2. Have students research current modes of transportation on SNI today.
3. Have students use a pedometer to figure out how fast they walk. Ask students to calculate how long it would take them to walk from one end of SNI to the other. What if they were running?

