**Lesson One:** **Timeline**

**Length:** 1 hour

**Content Area:** Social Studies

**Strategies:** Research, Math (Dates), and possibly Computing (Internet)

**Materials:**

Encyclopedias, CD-ROM encyclopedias, and access to the Internet for research

Roll of poster paper

**Performance Expectation:**

Students will collectively create a timeline of Costa Rica’s historical events.

**Directions:**

Following the introduction to the unit on Costa Rica, students will have a basic knowledge of the country, including its location, type of government, and some aspects of its history. Using this information to start from, tell students that they will be working on a timeline of events in Costa Rica’s history. Divide students into five groups, with each group assigned to a different period in Costa Rica’s history. One group should have the time period of 8000 BC to 1502 AD. Another group will have the time period of 1502 to 1821. The last three groups are the time periods 1821 to 1889, 1889 to 1944, and 1944 to now. Instruct each group that a key event occurred during the beginning and ending years of each of their timelines. These events are as follows:

8000 BC; the earliest known time of human habitation in Costa Rica.

1502 AD; discovery of Costa Rica by Christopher Columbus.

1821; Costa Rica achieves independence from Spain.

1889; Costa Rica becomes a democracy.

1944; A second civil war in Costa Rica.

Now; have this last group of student’s use 1987 as their key ending date which is

when Costa Rica’s Oscar Sanchez won the Nobel Peace Prize.

Instruct these groups to research the events that occurred during their respective time periods. Once they have done their research, the group needs to get together and share what they found. Have them construct a timeline along the poster paper.

Once all groups have made their timelines, post them together on a wall to form a single, long timeline of Costa Rica’s history. This timeline should remain up throughout the unit on Costa Rica. This way students will always have it to refer to and will help students to learn the material more by seeing it every day.

**Adaptation:**

Each day before social studies class take an event on the timeline and have the group that worked on that part of the timeline describe the event. Start from the beginning of the timeline and work your way through it. This will facilitate learning of these historical events and allow students to learn from their peers.

**Assessment:**

One idea for assessment is to have each student in the group write a paragraph or two describing one event during their timeline. Each student should choose a different event.

**Lesson Two:** **Government: Costa Rica vs. the United States**

**Content Area:** Social Studies; Civics

**Strategies:** Research, Venn Diagrams, and possibly Computing (Internet)

**Length:** 1 hour

**Materials:**

Encyclopedias, CD-ROM encyclopedias, and access to the Internet for research

**Performance Expectation:**

Students will individually create Venn diagrams describing the similarities and differences between the governments of the United States and Costa Rica.

**Directions:**

Provide students with resources to research the differences and similarities between the United States and Costa Rican governments. After they have done their research, a brief review of Venn diagrams and their functions should be provided. Have students begin work on their Venn diagrams and encourage them to draw large enough circles to fit all the necessary information in. Request that students look at all aspects of the two governments, including laws, government composition, leaders, separation of powers, the courts, etc.

**Adaptation:**

To assist slower or learning or behavioral disabled students as well as those that work better with others, consider doing the lesson in pairs or even groups of three.

**Assessment:**

The product of this lesson should be evaluated based upon the inclusion of all aspects of the countries’ governments, the accuracy of the similarities and differences, and the clarity of these similarities and differences.

**Lesson Three:** **Volcano**

**Content Area:** Science

**Strategies:** Papier Mache, Observation, and Critical Thinking

**Length:** 3 hours (Span of 3 class periods)

**Materials:**

Volcano kits OR papier mache and baking soda, vinegar, and food coloring.

Trays that are at least an inch or so deep

Open-ended cylinders

Dish-washing soap

**Performance Expectation:**

Students will construct volcanoes and erupt them. They will also discuss in groups how this volcano is similar to real volcanoes in Costa Rica and what causes each to erupt.

**Directions:**

1 hour length for a Class Period

Begin by providing some background information on volcanoes and how they erupt. Introduce the two major types of volcanism, explosive and quiet, and ask children to find out whether the volcanoes in Costa Rica are explosive or quiet as they research what causes volcanoes to erupt. After these questions have been answered, have students prepare their papier mache to make their volcanoes with later in science class.

1 hour and 15 min length for a Class Period

During this time, students will begin making their volcanoes by molding the papier mache around the cylinders in the shape of a volcano. Encourage students to add texture that is typical of a volcano. They should consider such things as crevices where the lava would flow down, which could be made by using a pencil to carve out a path for the lava to flow through. Once students are finished, have them place volcanoes in a safe place to dry. They need to be placed on some material that the base of them will not stick to.

1 hour and 15 min length for a Class Period

Now students will finally get to erupt their volcanoes. This part of the lesson will take the least amount of time, but cannot be done until the volcanoes are fully dry. Put the volcanoes on the trays and place a heaping tablespoon of baking soda in the bottom of the cylinder and add a couple drops of food coloring and dish-washing soap, if desired. When they are ready to erupt their volcanoes, add about two parts vinegar to the one part baking soda. After the volcanoes have erupted, discuss with students the similarities and differences between their simulated volcano and real volcanoes in Costa Rica. For example, both erupt because of expanding gases that try to force their way out of the volcano, causing an explosion or lava flow in real volcanoes.

**Adaptation:**

If supplies are limited and/or behavioral problems are expected, consider just doing one volcano for the class. Also, to cut down on the behavioral problems and mess, it may help to perform the eruptions outside.

**Assessment:**

Have students write about what they learned about volcanoes through this activity. They should include the similarities to their volcanoes and real ones as well as what they learned about volcanoes in Costa Rica.

**Lesson Four:** **Precipitation**

**Content Area:** Math

**Strategies:** Graphing, Research, some Statistics, and possibly Computing (Internet)

**When:** 2 hour length (Span of 2 class periods)

**Materials:**

Encyclopedias, CD-ROM encyclopedias, and access to the Internet for research

World almanacs that show precipitation around the globe

**Performance Expectation:**

After making a bar graph of the precipitation in Costa Rica and locally, students will be able to make comparisons based upon that data. Thus, they will be creating a bar graph and then interpreting the results of their bar graph.

**Directions:**

1 hour for a Class Period

Begin the lesson by introducing the concept of monthly precipitation. Ask students whether it rains more where they live or in the rain forests of Costa Rica. What about in Costa Rica where there are not rain forests? These questions should prompt students’ thinking before they begin their research.

Once the students have a good idea of what monthly precipitation is, have them do research to find out how much rain falls each month in the two different locations. Tell them that they need accurate information because they will make bar graphs afterwards. Encourage students to also look for general differences in climate between the United States and Costa Rica. After all their research is done, they should begin work on their bar graphs. This may need to be begun and/or finished in the following math time slot.

1 hour for a Class Period

The bar graphs could be done in several different ways, but the graph on the following page works well because it compares the both places’ precipitation by month. Discuss with students the need for clarity of the information in their graph. Thus, students should see the need for having the data for each location next to each other on the graph for direct comparison. Ask for comments from the class on ways to make the graph and perhaps they will come up with a graph similar to the following or another format that would be acceptable. After a format has been decided upon, have students create their graphs using the information they gained through their research. These graphs should then be used by the students to make written comparisons between the local precipitation and that in Costa Rica. This paper and their graphs will be used in assessment.

**Adaptation:**

This lesson could be followed up with students actually recording their local precipitation for a month to have a real-life example of what monthly precipitation means. This extension would be great for students that had trouble with the lesson or in understanding monthly precipitation. As an adaptation to the adaptation, this extension could instead be done before the lesson so that students will know what monthly precipitation is coming into the lesson. Another adaptation would be to use only one

**Assessment:**

Students’ comparisons of the monthly precipitation levels locally and in Costa Rica can be evaluated on how well they were interpreted from their bar graph as well as how accurate they were. The graph itself can be graded based on its accuracy. However, when evaluating students written comparisons, consider how well they reflect the information on their graph. Do not take off points twice for inaccurate information.

Related Lesson Plans

* [Famous Americans](http://lessonplanspage.com/famous-americans/)
* [War of 1812](http://lessonplanspage.com/war-of-1812/)
* [CareerVillage Career Advice and Guidance for Every Student](http://lessonplanspage.com/careervillage-career-advice-and-guidance-for-every-student/)
* [Early Europeans Photo Story Project](http://lessonplanspage.com/early-europeans-photo-story-project/)
* [Student-Designed Curriculum: Helping Students Create Their Own Lesson Plans](http://lessonplanspage.com/student-designed-curriculum-helping-students-create-their-own-lesson-plans/)