

## LESSON PLAN for Shake, Rattle, & Roll Charleston

### The Charleston Earthquake - EARTHQUAKE!!! - What Do I Do?

**Developed By:** Kanelia Cannon

**Grade Level:** 8

**Content Area:** English Language Arts

**SC English/Language Arts Standards**

8-5.1, 8-6.1-6.7

**SC Social Studies Standards**

8-5.5

#### **Student Objectives**

Students will be able to .....

- Navigate the Internet to find relevant information about an assigned topic
- correctly cite sources in APA format
- create an informational text using print and appropriate images

**Duration:** Three-Four Days

#### **Materials**

Computers with a word processor and Internet Access

Printer

Note Cards

Paper (White or Multi-Colored)

Account on Web Poster Wizard (<http://poster.4teachers.org/>)

#### **Procedure**

1. Students will research the following sites to find the proper procedures for earthquake safety
  - a. <http://scearthquakes.cofc.edu/EQsafety.html>
  - b. <http://www.fema.gov/kids/protect.htm>
  - c. [http://www.fema.gov/kids/tch\\_eq.htm](http://www.fema.gov/kids/tch_eq.htm)
  - d. [http://scearthquakes.cofc.edu/support\\_files/earthquake\\_tour.pdf](http://scearthquakes.cofc.edu/support_files/earthquake_tour.pdf)
  - e. <http://www.fema.gov/hazard/earthquake/index.shtm>
  - f. <http://geology.com/articles/earthquake-safety.shtml>
  - g. <http://www.fema.gov/plan/prevent/earthquake/pdf/fema-526.pdf>
2. Students must use note cards to keep track of their notes and sources.
3. Students will then create a kid-friendly brochure about earthquake safety using Microsoft Word (or any word processor program) and images from the Internet. Students will also submit a bibliography in APA format.
4. Students will also make a poster to accompany the brochures using <http://poster.4teachers.org/>. Students, again, will submit a bibliography in APA format.

## **The Charleston Earthquake - When the Earthquake Hit.....**

**Developed by:** Kanelia Cannon

**Grade Level:** 8

**Content Area:** English Language Arts

### **SC English/Language Arts Standards**

8-1.6, 8-2.2, 8-2.4, 8-2.6, 8-4.2, 8-4.3, 8-4.4, 8-4.7, 8-5.2

### **SC Social Studies Standards**

8-5.5

### **Student Objectives**

Students will be able to .....

- expresses themselves orally
- respond to written and visual text
- create a multi-paragraph composition using Standard American English, description, and complete sentences.

**Duration:** Two-Three Days

### **Materials**

*Personal Experience of the Great Charleston Earthquake* by Isabella Strybing Klinck

*City of Heroes: The Great Charleston Earthquake of 1886* by Richard N. Cote

Images of Earthquake Damage ([http://www.eas.slu.edu/Earthquake\\_Center/1886EQ/thumbnails.html](http://www.eas.slu.edu/Earthquake_Center/1886EQ/thumbnails.html))

Mini-Journals (This is simply bounded cardstock and lined paper. You can pre-bind the books or bind them after students have finished writing.)

- Card Stock
- Filler Paper
- Binding Spines
- Binding Machine

Chart Paper

Markers/Colored Pencils

### **Procedure**

1. The teacher will read excerpts of *Personal Experience of the Great Charleston Earthquake* by Isabella Strybing Klinck and *City of Heroes: The Great Charleston Earthquake of 1886* by Richard N. Cote
2. The teacher will also provide students with images of the 1886 Charleston Earthquake damage ([http://www.eas.slu.edu/Earthquake\\_Center/1886EQ/thumbnails.html](http://www.eas.slu.edu/Earthquake_Center/1886EQ/thumbnails.html))
3. The teacher will lead a class discussion about the earthquake. Here are some suggestions:
  - a. Do you think that the residents of Charleston were expecting this disaster?
  - b. Do you think the residents were prepared?
  - c. What do you think was going through their minds during the earthquake?
  - d. What did they lose to the earthquake?

- e. How do you think they felt afterwards?
  - f. How would you have felt during the earthquake?
  - g. How would you have reacted afterwards?
4. The teacher will make a chart of students' responses to hang in the front of the room.
  5. After the discussion, provide each student with mini-journal.
  6. Have students imagine that they are residents of Charleston in 1886.
    - a. Students will have to journal about four situations.
      - i. What they were doing the day before the earthquake occurred.
      - ii. What happened during the earthquake and how did it make you feel?
      - iii. The day after the earthquake
      - iv. What life is like a week after the earthquake occurred?

**Assessment**

Student's journals will be scored using the following rubric.

**Story Writing : Charleston Earthquake Journal**

CATEGORY	4	3	2	1
<b>Content/Development</b>	<ul style="list-style-type: none"> <li>• Presents a clear central idea about the topic</li> <li>• Fully develops the central idea with specific, relevant details</li> <li>• Sustains focus on central idea throughout the writing</li> </ul>	<ul style="list-style-type: none"> <li>• Presents a central idea about the topic</li> <li>• Develops the central idea but details are general, or the elaboration may be uneven</li> <li>• Focus may shift slightly, but is generally sustained</li> </ul>	<ul style="list-style-type: none"> <li>• Central idea may be unclear</li> <li>• Details need elaboration to clarify the central idea</li> <li>• Focus may shift or be lost causing confusion for the reader</li> </ul>	<ul style="list-style-type: none"> <li>• There is no clear central idea</li> <li>• Details are sparse and/or confusing</li> <li>• There is no sense of focus</li> </ul>
<b>Organization</b>	The story is very well organized. One idea or scene follows another in a logical sequence with clear transitions.	The story is pretty well organized. One idea or scene may seem out of place. Clear transitions are used.	The story is a little hard to follow. The transitions are sometimes not clear.	Ideas and scenes seem to be randomly arranged.
<b>Accuracy of Facts</b>	All facts presented in the story are accurate.	Almost all facts presented in the story are accurate.	Most facts presented in the story are accurate (at least 70%).	There are several factual errors in the story.

<b>Creativity</b>	The story contains many creative details and/or descriptions that contribute to the reader's enjoyment. The author has really used his imagination.	The story contains a few creative details and/or descriptions that contribute to the reader's enjoyment. The author has used his imagination.	The story contains a few creative details and/or descriptions, but they distract from the story. The author has tried to use his imagination.	There is little evidence of creativity in the story. The author does not seem to have used much imagination.
<b>Action</b>	Several action verbs (active voice) are used to describe what is happening in the story. The story seems exciting!	Several action verbs are used to describe what is happening in the story, but the word choice doesn't make the story as exciting as it could be.	A variety of verbs (passive voice) are used and describe the action accurately but not in a very exciting way.	Little variety seen in the verbs that are used. The story seems a little boring.
<b>Focus on Assigned Topic</b>	The entire journal is related to the assigned topic and allows the reader to understand much more about the topic.	Most of the journal is related to the assigned topic. The story wanders off at one point, but the reader can still learn something about the topic.	Some of the journal is related to the assigned topic, but a reader does not learn much about the topic.	No attempt has been made to relate the journal to the assigned topic.
<b>Setting</b>	Many vivid, descriptive words are used to tell when and where the story took place.	Some vivid, descriptive words are used to tell the audience when and where the story took place.	The reader can figure out when and where the story took place, but the author didn't supply much detail.	The reader has trouble figuring out when and where the story took place.
<b>Problem/Conflict</b>	It is very easy for the reader to understand the problem and why it is a problem.	It is fairly easy for the reader to understand the problem and why it is a problem.	It is fairly easy for the reader to understand the problem but it is not clear why it is a problem.	The problem is not clear.

Lesson Plan for Shake, Rattle, & Roll, Page 5 of 8

<b>Requirements</b>	Responded to all 4 journal prompts.	Responded to 3 journal prompts.	Responded to 2 journal prompts.	Responded to only 1 journal prompt.
<b>Conventions</b>	Provides evidence of a consistent and strong command of grade-level conventions (grammar, capitalization, punctuation, and spelling).	Provides evidence of an adequate command of grade-level conventions (grammar, capitalization, punctuation, and spelling).	Provides evidence of a limited command of grade-level conventions (grammar, capitalization, punctuation, and spelling).	Provides little or no evidence of having a command of grade-level conventions (grammar, capitalization, punctuation, and spelling).

Date Created: **October 05, 2009** using RubiStar and SC Writing Rubric.

Interdisciplinary title: Shakin' and Quakin'

Developed by: 8<sup>th</sup> Grade Team, A. L. Corbett Middle School

Grade Level: 8<sup>th</sup> Grade

Content Area: Science

Unit Objective (Science):

8-3.3 Infer an earthquake's epicenter from seismographic data.

Standard Correlations:

ELA correlation: Expository Writing

Math correlation: Constructing graphs and tables

Duration: 1 week

Materials:

- Copy paper
- Graph paper
- Rulers
- Colored pencils
- Compasses
- Class set of Slinkys
- Laminated maps of various earthquake regions of the Earth

Procedures:

1. Students will study wave movement of earthquakes by using Slinkys in order to create P waves and S waves.
2. Students will work in pairs to create waves. They will then demonstrate each type of wave by acting out the type of wave with a group of similar students.
3. After studying the movement of the waves, students will then analyze the way that scientist use seismograph readings to determine the arrival of waves at a seismographic location.
4. Students will then get in groups of three to analyze the recordings of various seismograph readings from a particular station. They will then graph the arrival times and explain the correlation between the arrival of the P and S waves in relation to the seismographic station location.
5. After practice with these arrival times, students will be given a packet of information: a map with that contains the location of the three seismographic locations on it and arrival times of P and S waves at three separate station locations. Students will graph arrival times for each station.
6. They will then determine the epicenter of the earthquake by using the information from the graphs they constructed. They should draw three concentric circles with their compasses on the map provided. The location of the intersection of the circle determines the epicenter.

Assessment:

Following the activity students must write –up a “formal” report as if they were the scientist at the station closest to the epicenter of the quake. This report will serve as an assessment. They must report only factual information and be written in a concise manner. Students will be assessed on correct information as well as format for the formal report.

**Interdisciplinary Unit Title: Earthquakes**

**Developed by: Berst and Watts**

**Grade Level: 8**

**Content Area: Social Studies**

**Standards Correlations for two (2) or more content areas:**

SC History 8- 5.1, 8-5.5

**Duration:** 10 days

**Materials:** Charleston: A Historic Walking Tour, City of Heroes; Personal Experience of the Great Charleston Earthquake; websites; primary sources; cover stock, legal size paper, glue sticks, 1 yard of ribbon per student; scissors

**Procedures:**

1. Divide class into groups; assign parts to be read and reported on to the rest of the class from the City of Heroes and the Personal Experience of the Great Charleston Earthquake .
2. Research Project: Choose 4 of the following to research and gather information (text, pictures, graphs, etc.) clothing, transportation, communications, art, music, politics, economic and social conditions of the time. Create a pop up book to showcase the research work

**Assessment:** Observation, discussion, pop up books

**Teacher: Mrs. T. Davis**

**Classes: 8<sup>th</sup> grade (3 periods)**

**Subject: Introduction to Computers**

**Unit Topic: Charleston Earthquake: The History of the Gullah Language**

**Standards: C. Application Software: #1 and Researching: Applying the Skills of Inquiry and Oral Communication: 8-6.**

**Objectives: TLWBAT: Access and use information from a variety of sources to research the history of the Gullah Language.**

**Procedures/Activities:**

The teacher will:

- Introduce topic
- Mini lesson of lesson to be taught
- Question/Answer session
- Give daily lesson

The student will:

- New lesson introduction
- Mini lesson of lesson for the day
- Question/Answer session
- Complete daily lesson

**Assessment:** Thinking Maps, presentation.