



# South Carolina

**Full STEAM Ahead:**

**Connecting Library of Congress Primary Sources and Graphic Novels**

## Lesson Plan Template

**Author(s):**

Elizabeth Long, Alicia Marthers

**Grade Level(s):**

5th

**Subject:**

Science

**Length of Class: 1 hour, 1 week to read the book**



<b>Image Citation:</b>	
Estudio, A. (n.d.). <i>Volcano eruption Calbuco, Chile</i> [Photograph]. Creative Commons. <a href="https://search.creativecommons.org/photos/e912e47b-6bc3-497f-b051-13bc1600d574">https://search.creativecommons.org/photos/e912e47b-6bc3-497f-b051-13bc1600d574</a>	
<b>Lesson Title:</b>	Volcanoes and Primary Sources
<b>Overview:</b>	Students will learn about and use primary sources to make connections between the earth's plate tectonics and various landforms.
<b>Learning Objective:</b>	The student will be able to identify and define primary sources.  The student will be able to analyze how volcanoes and plate tectonics affect Earth's surface.
<b>Standards:</b>	5.RI.7.1 Compare and contrast how events, topics, concepts, and ideas are depicted in primary and secondary sources.  5.E.3B.1 Analyze and interpret data to describe and predict how natural processes (such as weathering, erosion, deposition, earthquakes, tsunamis, hurricanes, or storms) affect Earth's surface.
<b>Essential Question:</b>	How can we use primary sources to learn about scientific & historical events?
<b>Supporting Question(s):</b>	What are primary sources? How are mountains, volcanoes, and earthquakes connected?
<b>Digital Primary and Secondary Sources:</b>	<a href="#">Map of Tectonic Plates</a> <a href="#">Map of Active Volcanoes</a> <a href="#">Ring of Fire Map</a> <a href="#">Photographs of Mount Saint Helens</a> <a href="#">Mount Saint Helens Video</a>
<b>Required Classroom Materials:</b>	Teacher will need: <a href="#">Primary Sources/Volcanoes slideshow</a> <i>Volcanoes: Fire and Life</i> by Jon Chad Computer Smart Board/Promethean Board (something to project the presentation and images)

	<p>Students will need:</p> <p><i>Volcanoes: Fire and Life</i> by Jon Chad</p> <p>Map of Tectonic Plates (linked above)</p> <p>Map of Active Volcanoes (linked above)</p> <p>Pencil</p> <p>Scratch paper</p>
<b>Classroom Environment:</b>	Students should be partnered up and sitting together where they can see the Smart/Promethean Board.
<b>Differentiation and Adaptations:</b>	<ul style="list-style-type: none"> <li>- Pair stronger readers with struggling readers</li> <li>- Use of graphic novel makes information more accessible to students that may be struggling readers through the use of images and non-academic language.</li> </ul>

<b>Lesson Sequence/Procedures</b>	
<b>Estimated Time Needed</b>	<b>Detailed Description of Teaching and Learning</b>
15 minutes	Pair students together and pass out one copy of each map to each group (tectonic plates and volcanoes - don't tell them what the maps are showing them). Give students 5 minutes to look over the maps and make observations. After the time is up, ask students to tell you what they notice about the maps. Write down their observations on the board.
10 minutes	Tell students what the maps are showing them after the discussion has finished. Tell students to look at the maps again and see what they notice now that they know what they are showing. Write down the new observations on the board.
10 minutes	Teach mini-lesson on how tectonic plates and volcanoes are related.
10 minutes	Teach mini-lesson on primary sources. Use primary source volcano slide show.
15 minutes	Distribute graphic novels. Have students work with partners to identify various volcanoes.

<b>Assessments:</b>	Students will use their scratch paper to answer the exit ticket questions at the end of the primary sources slide show. The teacher will use the answers to the questions to help guide
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	instruction for future lessons, whether whole group or small group.
<b>Learning Extensions:</b>	<ul style="list-style-type: none"><li>- Read through <i>Volcanoes: Fire and Life</i> graphic novels independently</li><li>- Use the primary source analysis tool from The Library of Congress to analyze photographs from the Seattle Times on Mount Saint Helens</li><li>- Using the graphic novel, map of tectonic plates, and map of volcanoes, students can try to find the different plates that the volcanoes discussed in the novel are located on.</li></ul>