

BOSTON GLOBE NEWS IN EDUCATION INDIVIDUAL COMMON CORE LESSON

Subject(s): Lesson 2: The impact of volcanoes on people and the environment **Grade:** 4 **Time:** 30-40 minutes

LESSON ELEMENTS	STUDENT-FRIENDLY TRANSLATION (# 2,3,4 only)
<p>1. Common Core Learning Standard(s) Addressed: CCSELA.R.I.3. Key Ideas and Details: Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text. CCSELA.RI.4. Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area. CCSELA.W.2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly. CCS4-ESS2-2. Analyze and interpret maps of Earth’s mountain ranges, deep ocean trenches, and the placement of volcanoes and earthquakes to describe patterns of these features and their locations relative to boundaries between continents and oceans.</p>	
<p>2. Learning Objective(s): <i>What will students know (content) and be able to do (skills) as a result of this lesson?</i></p> <ul style="list-style-type: none"> Students will identify and summarize important information from visual and written texts. Use a T-Chart to make comparisons between the negative and positive impact of volcanoes on people and the environment. For more detail about T-Chart go to: http://www.readwritethink.org/classroom-resources/printouts/chart-30225.html 	<p>(Students) You will be able to use a T-Chart to share what you have learned about the positive and negative impacts of volcanoes on people and the environment.</p>
<p>3. Relevance/Rationale: <i>Why are the outcomes of this lesson important in the real world? Why are these outcomes essential for future learning?</i> Students will develop their skills for comparing details about a topic and explore the possible negative and positive impact of volcanoes on people and the earth. (Negative – destruction of homes, loss of life; loss of habitats for animals; Positive – minerals for enriching the soil, new land masses, foundation for concrete)</p>	<p>(Students) You will develop your skills for comparing details about a topic and explore the possible negative and positive impacts of volcanoes on people and the environment.</p>
<p>4. Formative and Summative Assessment Criteria for Success: <i>How will you and your students know if they have successfully met the selected Common Core Learning Standards and outcomes? What specific criteria will be met in a successful product/process? What does success on this</i></p>	<p>(Students) You will complete a T-Chart to demonstrate your understanding of the negative and positive impacts of volcanoes on</p>

lesson's outcomes look like?

Students will complete chart T Chart comparing possible negative and positive impact of volcanoes on people and the earth. (Negative – destruction of homes, loss of life; loss of habitats for animals; Positive – minerals for soil, new land masses, base for strong cement for building)

people and the environment.

5. Activities/Tasks:

What learning experiences will students engage in? How will you use these learning experiences or their student products as formative assessment opportunities?

1. Review key words from volcanoes using word wall
2. Show National Geographic video provides a short overview of volcanoes, how they are formed and how they impact the environment
<http://kids.nationalgeographic.com/videos?videoGuid=881d504a-bdd6-4cfc-94bc-2a21e43b36f8>
3. After viewing video, have students list 3 negative and 3 positive impact on people and the environment. The following Globe articles are good additional resources
 - For Indonesia Volcano Ire Offers Blessings: <http://www.bostonglobe.com/news/world/2014/02/16/for-indonesia-volcano-ire-offers-blessings-amid-disaster/BBgQJ3xcrEMzJFiRW9urK/story.html>
 - Warn Your Legs: <http://www.bostonglobe.com/lifestyle/travel/2015/01/10/warm-your-legs-iceland/MA8YjWldl9YvHyxpHMpuol/story.html>Other online resources
 - Smithsonian Institute – Volcanoes and Humans http://volcano.si.edu/learn_galleries.cfm?p=17

6. Resources/Materials:

What texts, digital resources and materials will be used in this lesson?

Texts:

- National Geographic for Kid: Volcanoes by Anne Schreiber
- Volcanoes by Seymour Simons
- Into the Volcano: A Volcano Researcher at Work by Donna O'Meara
- Scholastic Series: I Survived the Destruction of Pompeii AD 79 by Lauren Tarshis
- True Books: Hawaii Volcanoes National Park by Sharlene Nelson

Digital Resources:

- National Geographic video provides a short overview of volcanoes, how they are formed and how they impact the environment
<http://kids.nationalgeographic.com/videos?videoGuid=881d504a-bdd6-4cfc-94bc-2a21e43b36f8>
 - For Indonesia Volcano Ire Offers Blessings: <http://www.bostonglobe.com/news/world/2014/02/16/for-indonesia-volcano-ire-offers-blessings-amid-disaster/BBgQJ3xcrEMzJFiRW9urK/story.html>
 - Warn Your Legs: <http://www.bostonglobe.com/lifestyle/travel/2015/01/10/warm-your-legs-iceland/MA8YjWldl9YvHyxpHMpuol/story.html>
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Handout #2: T-Chart for Compare and Contrast

How do volcanoes impact humans and the environment?	
Negative	Positive

Write a short report (3-4 sentences) on the negative and positive impact of volcanoes.	

7. **Access for All:**
How will you ensure that all students have access to and are able to engage appropriately in this lesson? Consider all aspects of student diversity.
 All lessons will
- Use of digital representation of content will provide students will access to information
 - Use of read aloud, think aloud, and graphic organizers will also be used to scaffold students’ background knowledge of topic and academic vocabulary
 - Students will have the opportunity to demonstrate their understanding through speaking, writing, and drawing

8. **Modifications/Accommodations:**
What curriculum modifications and/or classroom accommodations will you make for Students with Disabilities in your class? Be as specific as possible.
- Use of visual representation
 - Digital texts with audio
 - Small group and partner reading
 - Graphic organizers

Common Core Aligned Lesson: Reflection

- In addition, please choose ONE question below to respond to *after you have taught the lesson* OR create your own question and respond to it after you have taught the lesson.
1. How did this lesson support 21st Century Skills?
 2. How did this lesson reflect academic rigor?
 3. How did this lesson cognitively engage students?

4. How did this lesson engage students in collaborative learning and enhance their collaborative learning skills?

You are also encouraged to use a facilitated “Learning from Student Work” protocol to review and reflect on student work related to this lesson.