

SAUSD 4th Grade Common Core Lesson Planner



Unit: 4 Lesson: 1	Grade 4 Level/Course: The Big Wave	Duration: 2-3 days
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Big Idea: Resourcefulness, courage, and support can enable us to deal with life's challenges.

Essential Question:

- How do the Earth's geographical features interact with human survival?

Common Core and Content Standards	<p>Key Standards:</p> <p>RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.</p> <p>RI.4.2 Determine the main idea of a text and explain how it is supported by key details; summarize the text.</p> <p>RI.4.3 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.</p> <p>RI.4.7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.</p> <p>Other Standards addressed: RI.4.4, RI.4.5, RI.4.8, RI 4.9; W4.1, W4.2, W4.6; SL4.1, SL4.2, SL4.3; L4.1, L4.2, L4.3, L4.4b;</p>
Materials/ Resources/ Lesson Preparation	<p>Article: <i>What are Plate Tectonics?</i></p> <p>Visual Text 1. <i>Learn About Planet Earth – Plate Tectonics</i></p> <p>2. <i>How Earthquakes trigger Tsunamis</i></p> <p>3. Student Process Grid</p>

Objectives	<p>Content: Students will understand the challenges of living in Japan by viewing and writing about the geographical elements of the archipelago (chain of islands).</p>	<p>Language: Students will discuss and share their understandings of plate tectonics and the geographical features of Japan through speaking and writing in pairs, groups and as a whole class.</p>
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Depth of Knowledge Level	<p><input type="checkbox"/> Level 1: Recall <input type="checkbox"/> Level 2: Skill/Concept</p> <p><input type="checkbox"/> Level 3: Strategic Thinking <input type="checkbox"/> Level 4: Extended Thinking</p>
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College and Career Ready Skills	<p><input type="checkbox"/> 1. Demonstrating independence</p> <p><input type="checkbox"/> 2. Building strong content knowledge</p> <p><input type="checkbox"/> 3. Responding to varying demands of audience, task, purpose, and discipline</p> <p><input type="checkbox"/> 4. Comprehending as well as critiquing</p> <p><input type="checkbox"/> 5. Valuing evidence</p> <p><input type="checkbox"/> 6. Using technology and digital media strategically and capably</p>
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	<input type="checkbox"/> 7. Coming to understand other perspectives and culture
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Common Core Instructional Shifts	<input type="checkbox"/> Building knowledge through content-rich nonfiction texts <input type="checkbox"/> Reading and writing grounded from text <input type="checkbox"/> Regular practice with complex text and its academic vocabulary
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Academic Vocabulary	KEY WORDS ESSENTIAL TO UNDERSTANDING	WORDS WORTH KNOWING
PROVIDES TEACHER SIMPLE EXPLANATION	currents	coincidence
STUDENTS FIGURE OUT THE MEANING	T3: plate tectonics asthenosphere lithosphere molten spreading center subduction zone zone of convergence	trench landmass

Pre-teaching Considerations	Understand that the Earth is made up of certain layers and a core. Recognize that a map has a “key” which gives information.
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CCSS Foundational Standards (K-5 only)	FS4.3.a, FS4.4.a,c,
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Lesson Delivery

Instructional Methods	Check method(s) used in the lesson: <input type="checkbox"/> Modeling <input type="checkbox"/> Guided Practice <input type="checkbox"/> Collaboration <input type="checkbox"/> Independent Practice <input checked="" type="checkbox"/> Guided Inquiry <input type="checkbox"/> Reflection
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Pre-assessment or Motivational Piece:	Day 1: Student Journal Pg. 1: Using the map provided, students will work in small groups to analyze the map of Japan along with the caption and the key to answer the question: <i>Why might it be challenging to live and survive in Japan?</i> a. Display the map with caption on your document camera. b. Direct students to study the text features on the map, read the caption, and use the key to understand the symbols. This should be done in groups. You can facilitate, but try to have students come up with their own ideas about the map and caption. c. After discussion, students will work together to answer the question as a team in their
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Lesson Continuum



	<p>journals. (Note: they will probably not have a full understanding of “plates” – but this will show you what they might know and how to infer ideas from the map key)</p>																
<p>Preparing the Learner</p>	<p>View the Videos</p> <p>1. Video: Learn About Planet Earth – Plate Tectonics 2:37 https://www.youtube.com/watch?v=OinfMLdornU</p> <p>a. Direct students to view the video unencumbered. b. Have them write anything they remember in the process grid under the first section “What did you learn?” c. View the video a second time and enter any evidence you found to prove why it might be challenging to live and survive in Japan. d. If they have gathered any evidence to help them answer why it is challenging to survive in Japan, then they can write it in the next section of the grid (<i>using their prior knowledge from the map, they might have a clue</i>).</p> <p>2. Video: How Earthquakes trigger Tsunamis 2:15 min. https://www.youtube.com/watch?v=xyKgamjegtQ</p> <p>a. Direct students to view the video unencumbered. b. Have them write anything they remember in the process grid under the first section “What did you learn?” c. Review the video and summarize more information from what they have learned. Use questioning and clarification as needed when viewing the video the 2nd time. d. If they have gathered any evidence to help them answer why it is challenging to survive in Japan, then they can write it in the next section of the grid.</p> <div style="float: right; border: 1px solid black; padding: 5px;"> <p style="font-size: small;">Understanding the text to answer: Why might it be challenging to live and survive in Japan?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Video 1: Learn About Planet Earth – Plate Tectonics</th> <th style="width: 15%;">Video 2: How Earthquakes Trigger Tsunamis</th> <th style="width: 15%;">Text 3: What are Plates Tectonics?</th> <th style="width: 15%;">Text 4: Japan's Tsunamis – “What caused the Japan Quake, 2011?”</th> </tr> </thead> <tbody> <tr> <td style="font-size: x-small;">Summarizing Skills What did you learn from this article?</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="font-size: x-small;">Inferential Skills When specific evidence did you find to help you answer the question?</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="font-size: x-small;">Connections How does your prior knowledge help you understand the text?</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> </div>	Video 1: Learn About Planet Earth – Plate Tectonics	Video 2: How Earthquakes Trigger Tsunamis	Text 3: What are Plates Tectonics?	Text 4: Japan's Tsunamis – “What caused the Japan Quake, 2011?”	Summarizing Skills What did you learn from this article?				Inferential Skills When specific evidence did you find to help you answer the question?				Connections How does your prior knowledge help you understand the text?			
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<p>Interacting with the Text/Concept</p>	<p>Day 2: Science Article: Plates Are Moving Beneath You http://www.geography4kids.com/files/earth_tectonics.html</p> <p>1. View all the text features to gain information prior to reading the text. 2. Read text by chunking it by each subheadings:</p> <p>Subheading 1: Chunk the text: Plates are Moving Beneath You Students can read this unencumbered if they are able to, or use guided reading techniques to have them read the text. Text dependent Questions for first subheading</p> <p>a. What are the plates compared to? How does this give you a picture of where the tectonic plates are on Earth? b. Why is the rock “molten” in the center of the Earth? (<i>Follow up – What is given off from the center of the Earth?</i>) c. What is this molten rock called? d. When can you see tectonic plates move?</p> <p>Fill in the Process Grid Section on Summarizing: e. Have students write one or two sentences in the summarizing section of the process grid from subheading 1 (Use summary cards if needed: Who/What, did what, to what).</p> <p>Subheading 2: Chunk the text: They Really Float? Students can read this unencumbered if they are able to, or use guided reading techniques to have them read the text.</p> <p>Text dependent Questions for second subheading</p> <p>a. What examples from the text help us understand the asthenosphere (molten rock)?</p>																



Lesson Continuum

- b. If necessary, use a step aside to understand “currents” (moving in a stream in a certain direction)
- c. Explain the 3 types of tectonic plate movement. (*Have students model with their hands the way tectonic plates move, using the labels: Spreading center, subduction zone, and zone of convergence.*)



spreading center (divergent)



subduction zone



zone of convergence

Fill in the Process Grid Section on Summarizing:

- d. Have students write one or two sentences in the summarizing section of the process grid from subheading 2 (Use summary cards if needed: Who/What, did what, to what).

Subheading 3: Chunk the text: Scientific Evidence:

Students can read this unencumbered if they are able to, or use guided reading techniques to have them read the text.

Text dependent Questions for third subheading

- a. How did scientists figure out that there was once only one landmass made from all the continents?
- b. What evidence has been discovered to back up the fact that there are tectonic plates on Earth?

Fill in the Process Grid Section on Summarizing:

- c. Have students write one or two sentences in the summarizing section of the process grid from subheading 3 (Use summary cards if needed: Who/What, did what, to what).
- d. As they gather evidence to help them answer why it is challenging to survive in Japan, they can write it in the next section of the grid.

Extending Understanding

Day 3

1. Video: Japan’s Tsunami - “What caused the Japan Quake, 2011?” 1:31 min.

Explain: Have students recall the map showing geographical features of Japan from day one. Have them reread what they wrote in their journal. Tell them that today they will confirm their understanding of all they have learned – noted in the process grid to answer the question – “*Why would it be challenging to live and survive in Japan?*”

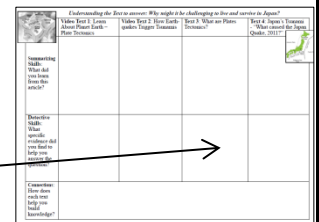
Putting it altogether:

Say: *In this final video you will see how your understanding of plate tectonics is connected with Japan. In 2011, there was a massive earthquake and Tsunami in the northern section of Japan.*

<https://www.youtube.com/watch?v=a8ztgVqR-rc>

- a. Direct students to view the video **unencumbered**.
- b. Have them write what they remember in the process grid under the first section “What did you learn?”
- c. View the video a second time and add any more evidence to the summary.
- d. Help students to think of the most significant evidence to help them answer why it is challenging to survive in Japan, and write it in the next section of the grid.

2. Metacognitive: Linking Information: Have students review what they learned from each text. In the last part of the process grid, have students explain how each text linked to the next text. (Linguistic patterns: *The 1st video talked about _____ and the 2nd video explained more about _____. The text told more about _____ and finally the last video _____.*)



3. Write from what you have learned – Revising the initial understanding in their pre-assessment. Student Journal Pg. 3

- a. On their own, answer this question: **Why might it be challenging to live and survive in Japan?** Make sure they use the evidence from their process grid to help them write their answer. Remind

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	<p>students that they should have more academic sentences and explanations within their explanation because of their new learning.</p> <p>b. Have student return to their original groups and share their information with their group. Building on each other's knowledge, they can add new information to their writing as needed.</p> <p>c. Finally, students will discuss with their group: <i>Would you want to live in Japan? Why or why not?</i> They can write their own personal decision in the student journal in the space provided.</p>
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Lesson Reflection

<p>Teacher Reflection Evidenced by Student Learning/ Outcomes</p>	
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