



Plate Tectonics Lesson Plan: Grade 6

Grade Level: **Sixth Grade** | Duration: **Two days, 30 minutes per lesson**

Objective

In this lesson, sixth graders use BrainPOP resources to define different plate boundaries, then describe the role of plate tectonics in different geological processes.

Students will:

- 1. Build Background Knowledge:**
 - Watch the BrainPOP Plate Tectonics movie.
- 2. Think and Do:**
 - Make-A-Map: Create a word map to define vocabulary.
 - Graphic Organizer: Complete a diagram explaining the role of plate tectonics in five geological processes.
- 3. Assess:**
 - Take the Plate Tectonics quiz.

Preparation

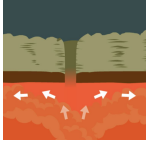
- Preview the BrainPOP movie [Plate Tectonics](#) to plan for any adaptations.
- Create and schedule Day 1 assignment: [Plate Tectonics Movie](#) and [Make-a-Map](#).
- Create and schedule Day 2 assignment: [Plate Tectonics Movie](#), [Graphic Organizer](#), and [Quiz](#).

Before the Lesson


Background knowledge helps students make sense of new ideas and experiences. To activate prior knowledge, ask these questions:

- *Do you think it's possible to take a journey to the center of the Earth? Why or why not?*
- *Can continents move? Why or why not?*

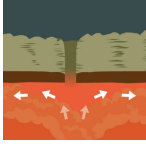
DAY 1: Build Background (10 minutes)

Lesson Steps	Offline Modifications	Modifications for Diverse Learners	ELL/Language Development
<div style="text-align: center;">  </div> <p>1. Watch the Plate Tectonics movie.</p> <p>Click pause at noted time codes to discuss key ideas:</p> <p>Timecode 2:03: Why would older seafloor be further from the peak of an underground ridge?</p> <p>Timecode 3:10: What are the forces in the planet that push tectonic plates apart?</p> <p>Timecode 4:57: How is volcanic activity similar to earthquakes?</p>	<ul style="list-style-type: none"> Print the movie transcript and highlight evidence that answers each of the discussion questions. Two students act out the transcript, one as Tim and the other as Moby. 	<ul style="list-style-type: none"> Set a specific viewing purpose for individual students or small groups based on lesson objectives and student readiness. For example, have students focus on what causes plates to move or what happens when plates interact at different boundaries. Pause at two key points and prompt students to summarize. Support recall by having students draw one or two key ideas from the movie. 	<ul style="list-style-type: none"> Pause for new vocabulary. Use the word in a sentence. Prompt students to say the word and repeat the sentence. Invite them to draw a picture of the word. Create a word wall with vocabulary and the drawing. Pause at key points and ask the discussion questions in the student's home language or English.



DAY 1: Think & Do (20 minutes)

Lesson Steps	Offline Modifications	Modifications for Diverse Learners	ELL/Language Development
<div style="text-align: center;">  </div> <p>2. Students open their Make-a-Map assignment. Or, if not using Assignment Builder, model how to open Make-a-Map.</p> <p>Students choose the Vocabulary Map template.</p> <p>Students click Keywords. They click and drag convergent boundaries, divergent boundaries, and transform boundaries on top of the template.</p> <p>Have students add nodes for each term. They can type in definitions or explanations in their own words and link images and/or video clips with each concept.</p> <p>When they finish, students click the Submit To Teacher button and/or print out.</p>	<ul style="list-style-type: none"> • Create a paper version of the concept map using index cards. • Students write a definition for each term on the card. 	<ul style="list-style-type: none"> • Model how to complete the concept map by adding nodes around the terms. Demonstrate how to add images and how to link to different nodes. • Assign a partially completed map to individual students. • Assign one of the three terms to individual students to create a concept map around. • As a challenge, students can add more terms to their concept maps, linking terms together and describing relationships. 	<ul style="list-style-type: none"> • Say the term(s) in students' home language. Then say the words in English. Have the student repeat in English. • Use the term in a sentence. Prompt students to say the word and repeat the sentence. • Have students use images to describe each term.

DAY 2: Build Background (5 minutes)


Lesson Steps	Offline Modifications	Modifications for Diverse Learners	ELL/Language Development
 <p>3. Watch the Plate Tectonics movie again.</p> <p>Prompt students to find a fact or something new that they didn't notice the first time.</p>		<ul style="list-style-type: none"> Students return to their drawings of key concepts from the first viewing and add new details. As a challenge, invite students to identify more than one new fact. 	

DAY 2: Think & Do (20 minutes)

Lesson Steps	Offline Modifications	Modifications for Diverse Learners	ELL/Language Development
 <p>4. Students open their Graphic Organizer assignment. Or, if not using Assignment Builder, model how to open the Graphic Organizer.</p> <p>Students describe the role of plate tectonics in earthquakes, continent formation, volcanic eruptions, seafloor spreading, and mountain formation.</p>	<ul style="list-style-type: none"> Print the Graphic Organizer.  Students write in answers for each geological process. 	<ul style="list-style-type: none"> Students speak their response and brainstorm what they will write for each geographic process. Model how to complete the Graphic Organizer by filling in one of the processes. Demonstrate how to return to the movie to find evidence. Assign one or two processes to individual students. Support recall by prompting students to revisit the drawings they made after watching the movie. 	<ul style="list-style-type: none"> Say the name of each process in students' home language or English. Have them repeat it in English. Before students write, have them use their home language or English to discuss what they plan to write.

When they finish, students click the **Submit To Teacher** button and/or print out.

DAY 2: Assess (5 minutes)

Lesson Steps	Offline Modifications	Modifications for Diverse Learners	ELL/Language Development
 <p>5. Students open their Quiz assignment. Or, if not using Assignment Builder, model how to open the quiz.</p> <p>If you assigned the quiz, you will see students' results in your Dashboard. If not assigned, students click the Submit to Teacher button.</p>	<ul style="list-style-type: none">• Print the quiz for students to complete.	<ul style="list-style-type: none">• Read aloud the questions and answers.• Reduce the number of questions and/or possible answers (using the Quiz Mixer).• Support recall by revisiting movie drawings.	<ul style="list-style-type: none">• Read aloud the quiz in students' home language.• Highlight the key vocabulary in a printable version of the quiz.• Support recall by having students review drawings they made during the movie.