

Teacher Guide for the Lesson on **Great Rift Valley**

Standard:

WG.3(B) – describe the physical processes that affect the environments of regions, including weather, tectonic forces, erosion, and soil-building processes

Content Objective:

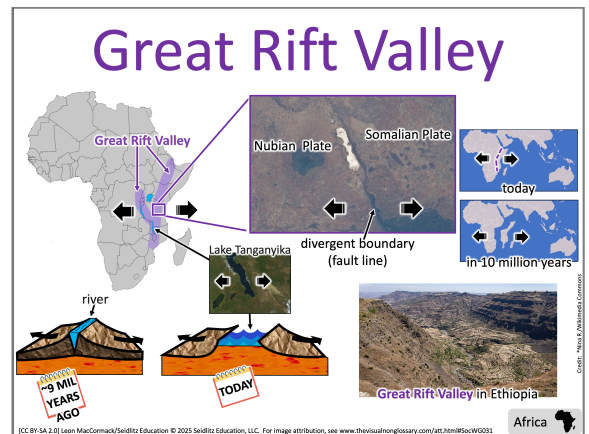
We can describe how tectonic forces like the formation of the **Great Rift Valley** affect the environment of a region.

Language Objective: Answer the following question in complete sentences using the sentence stem and the key vocabulary of the lesson:

What do you predict will happen to the **Great Rift Valley** in 50 million years if the Somalian Plate continues to diverge from the Nubian Plate?

*I predict that in 50 million years the **Great Rift Valley** will...*

Other key vocabulary: [continental drift](#)



By studying this visual, students might:

Notice	Wonder
<ul style="list-style-type: none"> The land is split down the middle with sharp cliffs on either side. 	<ul style="list-style-type: none"> How fast are the plates moving apart?
<ul style="list-style-type: none"> There are many large lakes in or near the rift. 	<ul style="list-style-type: none"> Will a new ocean really form in this area?
<ul style="list-style-type: none"> Some areas of the valley show signs of volcanic activity. 	<ul style="list-style-type: none"> Why are so many large lakes found near the rift?

<ul style="list-style-type: none"> • The rift stretches across multiple countries in Africa. 	<ul style="list-style-type: none"> • How does this area affect people living nearby?
<ul style="list-style-type: none"> • There are labels for tectonic plates like the Nubian and Somalian Plates. 	<ul style="list-style-type: none"> • What kind of animals live in the Great Rift Valley?

EXTENDING THE DISCUSSION

- After randomly calling on students, if there is anything from this list that was not mentioned, then ask the class, "Did anyone notice...?"
- After students have shared what they notice, ask the class, "Did anyone wonder...?" using the suggestions above or anything else you might think is interesting or relevant to the lesson.

Structured Conversation Prompts

OBSERVATIONAL	RELATIONAL	INFERENTIAL
<p>What is the Great Rift Valley?</p> <p>The Great Rift Valley is...</p>	<p>How is the Great Rift Valley related to continental drift?</p> <p>The Great Rift Valley is related to continental drift because...</p>	<p>What do you predict will happen to the Great Rift Valley in 50 million years if the Somalian Plate continues to diverge from the Nubian Plate?</p> <p>I predict that in 50 million years the Great Rift Valley will...</p>

Example Student Responses to the Observational Question

Low-Level	High-Level
<p>The Great Rift Valley is a big valley in Africa with cracks and lakes.</p>	<p>The Great Rift Valley is a rift valley formed by the divergence of tectonic plates, creating a large depression in the Earth's crust.</p>

RESPONDING TO RESPONSES

Emphasize and celebrate each student's use of the key vocabulary to support a culture of "no wrong answers."

STRUCTURING STUDENT CONVERSATIONS

Have students list observations from the visual as a warm-up, then use the Q-SSS-A process to guide small-group conversations. In the slide decks, brackets can be moved to prepare the structured conversation. In the example to the right, students will be instructed: [Q-SSS-A](#).

- To put a thumb up, then lower their hand when they are ready to answer the question
- To share with their elbow/shoulder partner, and that the student with the darkest shoe will share first
- That they will be randomly called on after the conversation

[Here is an example](#) of structuring a conversation with Q-SSS-A.

Note: the inferential question is the same as the language objective. It is recommended that students answer the inferential question in a small-group discussion before answering it individually as the closure or exit ticket of the lesson.



Structured Reading

READING PURPOSE	PAT LIST	POST-READING DISCUSSION
<p>The purpose for reading is to explore how the Great Rift Valley shows the long-term effects of tectonic activity on landscapes and regions.</p>	<ul style="list-style-type: none"> • The names of the tectonic plates involved in forming the Great Rift Valley • How the valley has changed over time • The size and location of the Great Rift Valley • The connection between the African Great Lakes, Lake Victoria, and tectonic activity • Predictions about what could happen if the plates continue to move apart 	<p>How does the Great Rift Valley show the long-term impact of tectonic forces on regional environments?</p> <p><i>The Great Rift Valley shows the long-term impact of tectonic forces because...</i></p>

STRUCTURING THE READING

Communicate the purpose of reading to the students and instruct them to make a note every time they see something on the PAT ("Pay Attention To") list. How you have students note items on the PAT list is up to you. This could include:




- Putting an asterisk in the margin
- Underlining text that supports the PAT list
- Putting a comment in the margin

Follow the reading with the post-reading discussion. Structure this discussion using the Q-SSS-A process just like the structured conversations in this lesson.

Note: you might find the relational question is better discussed before or after the reading. This depends on whether the relational question is directly related to the reading or might make connections across units.

DIFFERENTIATING THE READING

You will notice that three different reading passages are provided with this lesson. Look at the shapes in the top-left of each passage to determine the grade level.

BELOW GRADE LEVEL	ON GRADE LEVEL	ABOVE GRADE LEVEL
 <p><i>Triangle is bottom-left</i></p>	 <p><i>Square is bottom-left</i></p>	 <p><i>Circle is bottom-left</i></p>

In a class with students at diverse reading level proficiencies, you can give the appropriate reading passage to different students, while having all students follow the same PAT list and post-reading discussion.