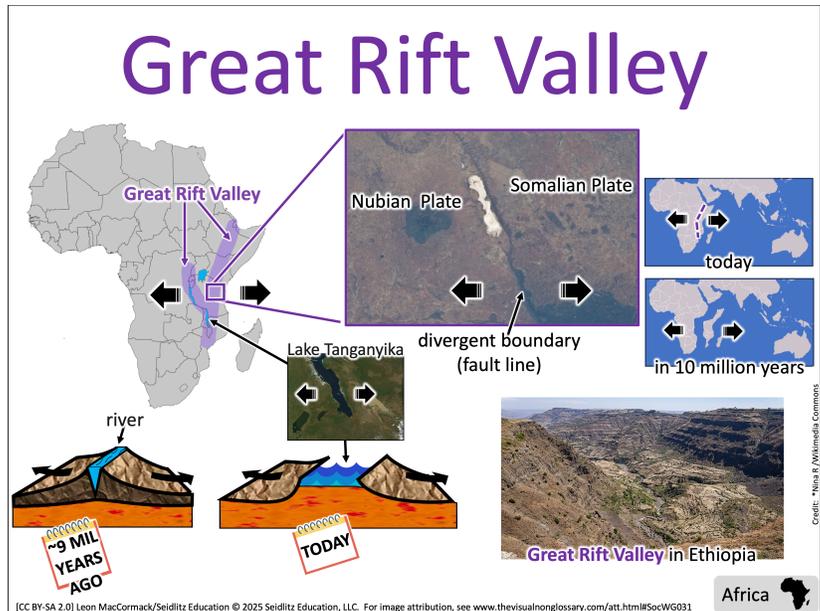


The Moving Land of East Africa

The purpose for reading is to explore how the Great Rift Valley shows the long-term effects of tectonic activity on landscapes and regions.

Pay Attention To:

- 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



Earth's surface is always changing because of large pieces of rock called tectonic plates. Their slow movement is called **continental drift**, and it helps create landforms like mountains and valleys. When plates crash into each other, they can form mountain ranges. When one plate slides under another, deep ocean trenches form. When plates move apart, they can make long cracks in the land called rift valleys. One of the best examples is the **Great Rift Valley** in eastern Africa, where the Nubian and Somalian plates are slowly pulling away from each other.

The **Great Rift Valley** is almost 4,000 miles (6,400 kilometers) long. It stretches through several African countries, from Ethiopia to Mozambique. It began forming about 25 to 30 million years ago. The two plates move apart a little bit every year—only 6 to 7 millimeters. This valley is part of a bigger rift system that also reaches into places like Jordan.

This slow movement has made the land in the valley full of cliffs, cracks, and volcanoes. As the plates move apart, the valley gets wider. Scientists think that someday, a new ocean could form in this area.

The movement of the plates has also made many large lakes in the valley. These are called the **African Great Lakes**. One of them is **Lake Victoria**, which is one of the biggest lakes in the world. It provides water and homes for animals and people. It also starts the **White Nile River**, which flows to northern Africa.

The **Great Rift Valley** shows how Earth is always changing. It helps us see how **tectonic forces** can change the shape of land and affect the people and nature in a region.

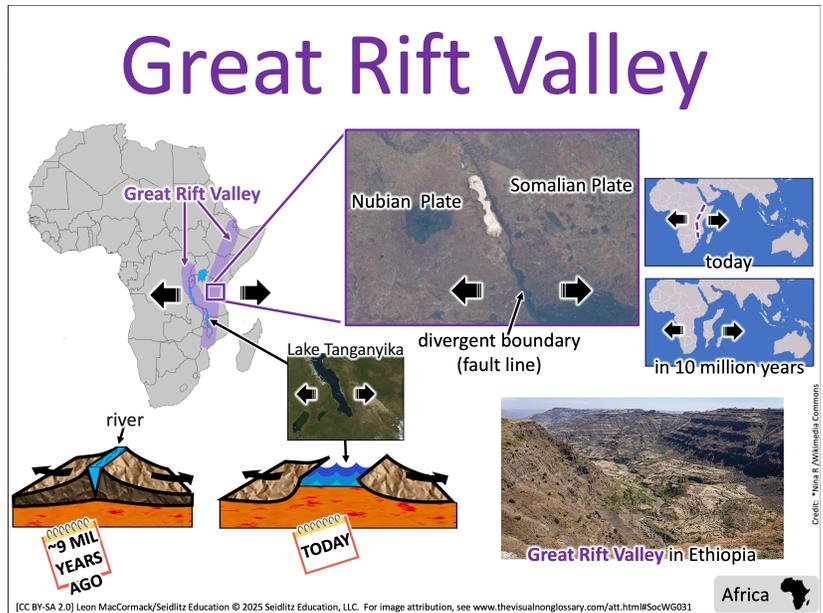


Forces That Shape the Earth

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Earth's surface is not fixed—it is shaped by the movement of massive tectonic plates beneath it. This ongoing motion, known as **continental drift**, is responsible for the formation of many major landforms. When plates collide, they push up mountain ranges. When one slides beneath another, deep ocean trenches form. When plates move apart at divergent boundaries, they create long, sunken features called rift valleys. One of the most well-known examples of this process is the **Great Rift Valley** in eastern Africa, where the Nubian and Somalian plates are slowly pulling away from each other.

The **Great Rift Valley** stretches for nearly 4,000 miles (6,400 kilometers) across eastern Africa, from Ethiopia in the north to Mozambique in the south. It began forming about 25 to 30 million years ago, and the plates are currently drifting apart at a rate of approximately 6 to 7 millimeters per year. Although the valley lies within Africa, it is part of a broader rift system that extends north into the Levant region, including parts of Jordan and the Dead Sea.

This ongoing separation has carved a dramatic landscape of cliffs, escarpments, and volcanic peaks. As the plates continue to diverge, the valley floor widens. Some scientists believe that in tens of millions of years, this region could split completely and form a new ocean between the plates.

The valley's tectonic activity has also shaped its lakes and rivers. Several of Africa's largest freshwater bodies—known as the **African Great Lakes**—lie along the rift. Among them is **Lake Victoria**, one of the world's largest lakes by surface area. It supports nearby ecosystems and is the source of the **White Nile River**, linking the rift to distant regions in northeastern Africa.

The **Great Rift Valley** is more than just a geographic feature—it's a visible sign of Earth's crust in motion. Its formation offers a powerful example of how tectonic forces reshape regional environments over time and continue to shape the world we live in.

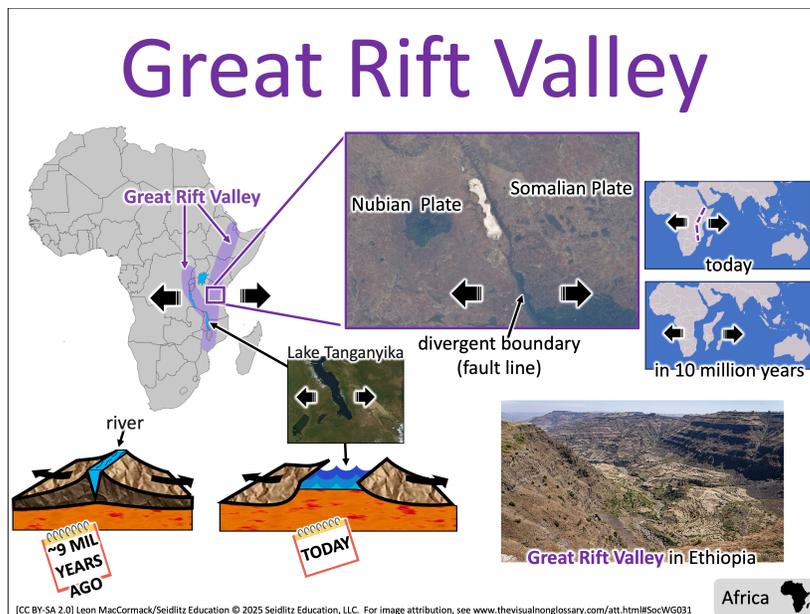


Unfolding the Earth: The Story of the Great Rift Valley

The purpose for reading is to explore how the Great Rift Valley shows the long-term effects of tectonic activity on landscapes and regions.

Pay Attention To:

- The names of the tectonic plates involved in forming the Great Rift Valley
- How the valley has changed over time
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The surface of our planet is in constant motion, driven by the powerful force of tectonic activity. This movement, called **continental drift**, has shaped Earth's surface for millions of years. It creates vast mountain ranges when plates collide, deep ocean trenches when one plate subducts beneath another, and long fractures called rift valleys when plates move apart. One of the clearest illustrations of this last process is the **Great Rift Valley**, where the Nubian and Somalian plates—both part of the African Plate—are slowly diverging.

Spanning nearly 4,000 miles (6,400 kilometers), the **Great Rift Valley** extends through eastern Africa from Ethiopia to Mozambique. It began to form 25 to 30 million years ago and continues to change as the plates shift about 6 to 7 millimeters annually. Although contained within Africa, the valley is part of a much broader rift system that reaches northward into the Levant, touching parts of Jordan and the Dead Sea.

The geological activity in this region has carved a stunning and complex landscape, including escarpments, volcanic cones, and fractured terrain. The ongoing divergence of the plates continues to reshape the region, and some geologists suggest that the valley may one day open into a new ocean, permanently dividing sections of the continent.

This tectonic activity has also shaped the region's hydrology. The **African Great Lakes**, including **Lake Victoria**, were formed within the rift. **Lake Victoria**, notable for its size, feeds the **White Nile River**, a critical waterway that connects the rift to ecosystems and civilizations far beyond its borders.

The **Great Rift Valley** offers geographers and scientists a living case study of plate tectonics in action. It is a reminder that the processes beneath our feet are ongoing and that these forces continue to mold both the physical environment and the human story.

