

▲ Climbers normally begin their ascent of Mount Fuji around noon, so they can stand at the top of Japan's highest mountain at sunrise the next morning.

Volcanoes are both creators and destroyers.

They can shape lands and cultures, but can also cause great destruction and loss of life. Two of the best-known examples are found at opposite ends of the world, separated by the Pacific

Fuji: Japan's Sacred Summit

Ring of Fire.

It's almost sunrise near the summit of Japan's
Mount Fuji. Exhausted climbers, many of
whom have hiked the 3,776 meters (12,388
feet) through the night to reach this point,
stop to watch as the sun begins its ascent,
spreading its golden rays across the mountain.

For everyone, this is an important moment: they have witnessed the dawn on Mount Fuji—the highest point in the Land of the Rising Sun.²

Located in the center of Japan, Mount Fuji (whose name means "without equal") is a sacred site. Japan's native religion, Shintoism, considers Fuji a holy place. Other people believe the mountain and its waters have the power to make a sick person well. For many, climbing Fuji is also a rite of passage. Some do it as part of a religious journey; for

others, it is a test of strength. Whatever their reason, reaching the top in order to stand on Fuji's summit at sunrise is a must for many Japanese—and every July and August, almost

Japanese—and every July and August, almost 400,000 people attempt to do so.

Fuji is more than a sacred³ site and tourist destination, however. It is also an active volcano around which four million people
have settled and sits just 112 kilometers (70 miles) from the crowded streets of Tokyo. The last time Fuji exploded, in 1707, it sent out a cloud of ash that covered the capital city and darkened the skies for weeks.

Today new data have some volcanologists concerned that Fuji may soon erupt again.
According to Motoo Ukawa and his associates at the National Research Institute for Earth Science and Disaster Prevention, there has

been an increase in activity under Fuji recently, which may be caused by low-frequency earthquakes. Understanding what causes these quakes may help scientists predict when Fuji, the biggest of Japan's 86 active volcanoes,
 will come back to life. In the meantime, locals living near Fuji hold special festivals each year

living near Fuji hold special festivals each year to offer gifts to the goddess of the volcano—as they have for generations—so that she will not erupt and destroy the land and its people below.

¹ An **ascent** is an upward movement.

² Japan is sometimes called the Land of the Rising Sun.

³ If something is **sacred**, it is believed to have a connection to God and should be given respect.



Near El Popo's summit, locals offer gifts to the volcano.

POPOCATÉPETL: MEXICO'S SMOKING MOUNTAIN

Halfway across the globe from Fuji, Popocatépetl—one of the world's tallest and most dangerous active volcanoes—stands just 60 kilometers (37 miles) southeast of Mexico City. Although the volcano (whose name means "smoking mountain") has erupted many times over the centuries, scientists believe its last great explosion occurred around 820 A.D. In recent years, however, El Popo, as Mexicans call the mountain, has been threatening to explode once more; in December 2000, almost 26,000 people were evacuated when El Popo started to send out ash and smoke. As with all active volcanoes, the question is not if it will erupt again (an eruption is inevitable); the question is when it will happen.

"Every volcano works in a different way," explains Carlos Valdés González, a scientist who monitors El Popo. "What we're trying to learn here are the symptoms signaling that El Popo will erupt." These include earthquakes or any sign that the mountain's surface is changing or expanding. The hope is that scientists will be able to warn people in the

surrounding areas so they have enough time to escape. A powerful eruption could displace over 20 million people—people whose lives would be saved if the warning is delivered early enough.

For many people living near El Popo—especially the farmers—abandoning their land is unthinkable. As anyone who farms near a volcano knows, the world's richest soils are volcanic. They produce bananas and coffee in Central America, fine wines in California, and enormous amounts of rice in Indonesia. For this reason, people will stay on their land, even if they face danger.

Today many people who live near El Popo continue to see the mountain as their ancestors did. According to ancient beliefs, a volcano can be a god, a mountain, and a human all at the same time. To appease El Popo and to ensure rain and a good harvest, locals begin a cycle of ceremonies that start in March and end in August. Carrying food and gifts for the volcano, they hike up the mountain. Near the summit, they present their offerings, asking the volcano to protect and provide for one more season.

▼ Children play on swings within sight of the smoking Popocatépetl.



⁴ If you appease someone, you try to stop them from being angry by giving them something they want.