

DISCOVER  
our AMAZING  
**WORLD**  
CLIL READERS

# VOLCANOES

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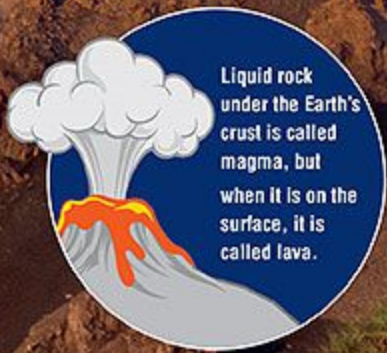
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A person in a red shirt and green pants stands on a rocky outcrop, holding a camera up to take a picture of a large volcano in the background. The volcano is erupting, with a thick plume of dark smoke rising into the sky and a bright red glow visible at its base. The sky is blue with some light clouds.

# The Fire Erupts

**A** group of tourists climb up the steep slope of Pacaya, an active volcano in Guatemala. As they ascend, the trees start to thin and the soil gives way to slabs of thick, black rock. The sun begins to set as they reach the volcano's peak. Steam rises in a large column just ahead of them. A soft, red glow emanates from the bottoms of the bulging mounds of fluid rock that slowly flow past. The group snap photos with their cameras and chat excitedly about the amazing experience they are sharing.

**D**eep beneath the tourists' feet, miles underground, much hotter liquid rock churns. Under the Earth's crust, super-heated rock is constantly flowing. This swirling mass is the source of the fire, smoke, and lava that pour out of Pacaya Volcano. But how does the fire within erupt from the Earth's surface? To understand this, we must go back to the beginning: to the birth of a volcano.



Liquid rock under the Earth's crust is called magma, but when it is on the surface, it is called lava.

# The Birth of a Volcano

**A** million years ago, deep in the Pacific Ocean, the sea floor rumbled, trembled, and finally cracked. A giant column of steam shot up from the depths. Scorching magma erupted through the ocean's crust. As the magma cooled, it formed a mound. More eruptions occurred over thousands of years. Magma blasted out of the Earth time and time again. Each new eruption piled new magma on top of the remains of the eruption before, forming a volcano. The volcano grew until it rose above the ocean's surface.

Today, we call this volcano Mauna Loa. It reaches 13,681 feet above sea level, and makes up half of the island of Hawaii. From its base on the ocean floor to its peak, it is 10.5 miles. It's taller than Mount Everest, the world's highest mountain. Its most recent eruption was in 1984, and its next eruption could happen at any time.



Mauna Loa is the largest and one of the most active volcanoes in the world.