

Notes

Use the Notes column to take notes and use SALSA™ strategies. There are a few hints to get you started.

Ask Why do you think the author started this piece by describing such a dramatic event?

Skim Headings help you identify different sections of text.

Fiery Neighbors

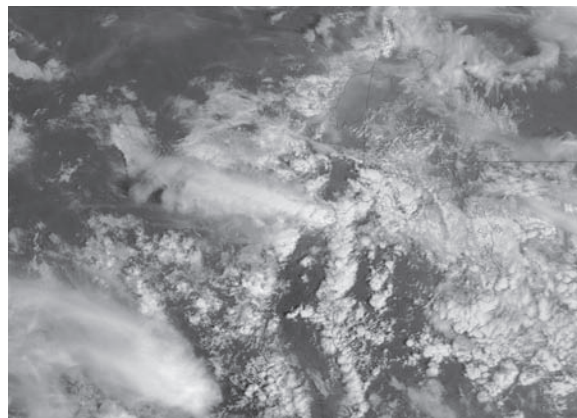
The air around you swirls with fire and ash. You cover your nose and mouth, but your lungs still burn. You must leave your home and all your belongings behind. The village you have always lived in sits on the side of a volcano, and that volcano is erupting right now!

Why Live Near a Volcano?

Nearly 500 million people live in the shadow of the Earth's 1,500 active volcanoes. You may wonder why anyone would ever live close to a volcano. Part of the answer may lie in the rich soil. After volcanoes erupt, they leave behind a thick layer of ash that is full of minerals. That makes the soil very fertile. Farmers can grow many crops in fertile soil.

In other cases, cities grow bigger and bigger. The people living at the edge of the city live closer and closer to a volcano. Often, the people who live near volcanoes are very poor. They cannot afford to move to a safer place.

People who live near volcanoes must be very careful. They and their governments need to be prepared to get everyone to safety. Even if a volcano has not erupted for thousands of years, there is always a chance it will erupt again. That is why scientists try to predict when an eruption might happen.



The eruption of Mount Nyiragongo in 2002 sent plumes of smoke and ash into the sky, killed 45 people, and destroyed 100,000 homes.

Image courtesy of MODIS Rapid Response Project at NASA/GSFC

Look Look here for important scientific terms and concepts related to volcanoes.

Seeing the Signs

Living near a volcano can have a terrible price. Luckily, **volcanologists** watch many of the world's volcanoes. They use a machine called a seismometer. The seismometer measures movements in the Earth near the volcano. If it shows lots of little earthquakes, they know the volcano may erupt soon.

Volcanologists also measure the level of gases like sulfur dioxide and carbon dioxide. If the level of these gases is high around the volcano, it may mean that it is about to erupt.

Volcanologists are getting better and better at predicting volcanic eruptions. But even now, they can only give about a week's warning. Volcanoes are still very dangerous. That is why people need to have a proper escape plan.

The Risks Are Real

In 2002, Nyiragongo, one of two big volcanoes in the Democratic Republic of the Congo, erupted and killed 45 people. More than 100,000 homes in the city of Goma were destroyed. Volcanologists knew that the volcano was going to explode. But the people who lived near the volcano were very poor. Most had no radio, no telephone, and no television. There was no easy way to warn everyone. There was also no plan about how so many people could be moved away from the volcano.

Notes

Solve Do you understand how scientists predict volcanic eruptions? If not, *Read Again*.

Ask Judging by the map, what is the name of the second volcano?

Major Volcanoes of the Democratic Republic of the Congo



Based on a U.S. Geological Survey map

This tragedy showed something inescapable. Even if scientists can tell when a volcano is about to explode, there must be a way to warn people if lives are to be saved. Nearly 500 million people are in danger that should not be ignored.

Assemble The conclusion of an informational passage often expresses a lesson the author feels strongly about.