

e-Edition Plus

A current events feature for teaching with electronic editions.

By Sara Shahriari

Iceland volcano eruption is worrying other nations

On the island nation of Iceland, a volcano has been rumbling and shooting smoke 12 miles into the air.

Ash from the volcano has blocked out light from the sun in some areas.

And people are worried that this country just below the Arctic Circle could have another eruption like the one last year that spewed so much ash that it shut down air travel on the continent of Europe for weeks.

The volcano that erupted this month — Grimsvotn volcano — is even bigger than the one that caused last year's problems. And though its activity slowed last week, experts are watching closely to see what happens next.

Volcanoes are a big part of the history of Iceland. The country is home to 35 active volcanoes, and there have been more than 30 eruptions in the last 100 years.

In fact, Iceland as a whole is a volcanic island, made of hot, liquid rock that has risen from deep within the Earth.

When the liquid rock — called magma — reached the Earth's surface, it cooled and solidified, forming the island.

Volcanoes are created when magma escapes through the outer layer of the Earth, called the crust.

The Earth's crust is made of formations called tectonic plates, which float on top of the second layer of the Earth, a layer of magma called the mantle.

In some places tectonic plates meet, and in others they pull apart. When the plates pull apart, magma rises from the mantle to the Earth's surface.

Plates pulling apart

Iceland is located on a region of the Earth called the Mid-Atlantic Ridge, where two tectonic plates pull apart.

A lot of the volcanic activity along the Mid-Atlantic Ridge happens under water, but in Iceland it reaches the surface.

On the surface of the Earth, volcanoes usually look like a giant cone rising above the land or water around them.

The lava, ash and gases released from a volcano come out of a crater at the top of the cone.

As more and more lava and ash come out of the volcano, they build the cone higher and higher.

Fiery history

Iceland has a long history of volcanic eruptions. In 1783 an eruption blocked out the sun for months. Most people in Iceland at that time lived by farming, and without sunlight their crops died.

Without crops, a food famine began in the country. Almost a quarter of the island's population died from hunger or poisonous gases from the eruption.

Scientists estimate there are about 1,500 active volcanoes on Earth today.

More than 50 in the United States are monitored closely by the Volcano Hazards Program, including Mount St. Helens in Washington State, which erupted in 1980, and volcanoes in the Hawaiian Islands, whose eruptions make the islands bigger every year.

With every eruption, volcanoes change the Earth — as in 1963, when a whole new island rose out of the ocean near Iceland. Since then, only scientists have been allowed to visit.

STR/RTN/Newscom



Ash and smoke from the eruption of the Grimsvotn volcano in Iceland caused cancellations of more than 500 airline flights. An observation plane checked out the volcano's smoke plume.

Talk About the News

- Safety is always a concern when a volcano erupts. This year and last, many airline flights in Europe were canceled because ash from an Iceland volcano made traveling by plane dangerous. As a class, discuss some of the most important steps governments can take to ensure safety from volcano eruptions. What are the biggest obstacles to getting people to act in the safest way, or to leave a volcano area? How can those obstacles be overcome?

Learning Standards: Engaging peers in constructive conversations about topics of interest or importance; responding to visual, written and electronic texts by making connections to students' personal lives and the lives of others.

Explore Your e-Edition



- Find a story in the e-Edition about the Grimsvotn volcano in Iceland. Or find a story online. Read the story carefully and summarize key facts you learned about the volcano, the problems the eruption is causing and possible threats to air travel. As a class, make a list on the chalkboard of the most important things learned from the stories the class read.

Learning Standards: Acquiring information from multiple texts and then organizing, analyzing and presenting it; interpreting the significance of the information.

- More than 1,500 volcanoes are active in the world. Go online and find a story about a volcano other than Grimsvotn. Learn as much as you can about the volcano. Use what you find to write a short, descriptive story about the volcano in the style of a story that would appear in an e-Edition features section. Pick an unusual or dramatic fact to emphasize at the beginning of your story to catch people's interest.

Learning Standards: Writing fluently for multiple purposes to produce compositions, such as stories, poetry, personal narratives, editorials, research reports, persuasive essays, resumes and memos; demonstrating ways in which communication can be influenced through word usage.

- When you read a newspaper or e-Edition, you can see that journalists interview many different people when they write a story. Imagine that you are a journalist writing about the volcanic eruption in Iceland. Make a list of three different types of people you would interview. Explain your choices.

Learning Standards: Acquiring information from a variety of written, visual and electronic texts; employing multiple strategies to construct meaning, including word recognition skills, context clues, retelling, predicting and generating questions.

How Well Did You Read?

Understanding what you read is a skill that will help you all your life. Review the story about the Iceland volcano by answering the questions below.

1. How many active volcanoes are there in Iceland?
A. 15
B. 25
C. 35
D. More than 50
2. Tectonic plates are part of what?
A. The Earth's crust
B. Magma
C. The Earth's mantle
D. Volcanic craters
3. What year did Mount St. Helens erupt?
A. 1783
B. 1963
C. 1500
D. 1980
4. Last year, airplane flights were canceled because of
A. Volcanic craters
B. Poisonous gas
C. Volcanic ash
D. Magma
5. From the story you can infer that the word "famine" means:
A. A kind of volcano eruption
B. A type of farming
C. A severe food shortage
D. An abundance of food