

Internet GeoLab

Ranking Hazardous Volcanoes

Some volcanoes can be explosively dangerous. Along with clouds of ash and other volcanic debris that can linger in the air for years after an eruption, pyroclastic flows, landslides, and mudflows are common volcanic hazards. An explosive volcano may not be a hazard to human life and property, however, if it is located in a remote area or erupts infrequently. A number of factors must be taken into account to determine if a particular volcano poses a risk.

PREPARATION

Problem

Which volcanoes on our planet pose the greatest risk to human life and property?

Hypothesis

Form a hypothesis about where you think the most hazardous volcanoes are located on Earth. Think about the potential risk to people and property near the volcano when formulating your hypothesis. Write your hypothesis in the space below.

Objectives

In this GeoLab, you will:

- **Gather** and **communicate** data about three volcanoes in different parts of the world.
- **Form conclusions** about the hazards posed by the volcanoes based on their location, size, lava type, and eruptive history.

Data Sources

Go to the Glencoe Science Web Site at science.glencoe.com to find links to volcano data on the Internet. You can also use current reference books and scientific magazines to aid in the collection of data.

PROCEDURE

1. Select a country and find out if there are any volcanoes in that country. If there are no volcanoes, choose another country. If there are a lot of volcanoes in that country, narrow your search.
2. Repeat step 1 for two other volcanoes. Copy and complete the data table on the next page with the information about each of the three volcanoes you selected.

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RANKING OF SOME HAZARDOUS VOLCANOES			
Volcano name			
Country			
Location of volcano (latitude and longitude)			
Type of volcano			
Composition of lava/ Explosiveness			
Date of last eruption			
Eruption interval (number of eruptions over a period of time)			
Height of volcano			
Distance to nearest population center			
Approximate number of people living near the volcano			
Type(s) of potential hazards			
Human hazard ranking (high, medium, low)			

**Internet
GeoLab****Ranking Hazardous Volcanoes****CONCLUDE AND APPLY**

Sharing Your Data Find this Internet GeoLab on the Glencoe Science Web Site at science.glencoe.com. Post your data in the table provided for this activity. Use the additional data from other students to complete your chart and answer the Conclude and Apply questions.

1. Which of the volcanoes you researched threatens the greatest number of people?
Where is this volcano located?

2. Analyze the data posted by others at the science.glencoe.com site. Which country has the greatest number of potentially dangerous volcanoes? Why?

3. Which country has the greatest total population threatened by volcanoes?
