

RESOURCE LIBRARY
ACTIVITY : 30 MINS

Types of Volcanic Eruptions

Students learn about two major types of volcanoes and watch and discuss a video.

GRADES

6 - 8

SUBJECTS

Earth Science, Geography, Physical Geography

CONTENTS

1 PDF, 1 Video, 1 Link

OVERVIEW

Students learn about two major types of volcanoes and watch and discuss a video.

For the complete activity with media resources, visit:

<http://www.nationalgeographic.org/activity/types-of-volcanic-eruptions/>

DIRECTIONS

1. Have students start the Venn Diagram.

Distribute a copy of the worksheet Venn Diagram to each student. Ask students to write the following labels:

- Left circle: Composite volcanoes
- Right circle: Shield volcanoes
- Overlapping circles: Both

If students already know any information about the two types of volcanoes, encourage them to write it. Tell students they will have an opportunity to check their information when they watch a video.

2. Introduce and watch the video.

Explain to students that they will watch a short video about two types of volcanoes. Encourage them to pay attention to descriptive phrases about the volcanoes. Show students the National Geographic video “Volcanoes 101,” which profiles two of the most common volcano types—with Vesuvius and Kilauea as examples.

3. Have students complete the worksheet independently.

Ask students to complete the Venn diagram with the information they learned in the video. If needed, show the video a second time. Students should include information such as:

- Composite volcanoes: steep slopes; thick, sticky lava; lava does not flow quickly or far; erupt violently
- Shield volcanoes: gentle slopes; runny lava; lava flows quickly; lava may flow far; erupt less violently

4. Have a whole-class discussion about how volcanic eruptions differ.

After watching the video, discuss basic differences between shield volcanoes and composite volcanoes. Ask:

- *What type of volcano is Mt. Vesuvius? What are the characteristics of that type? (composite, or stratovolcano; erupts violently)*
- *What type of volcano is Kilauea? What are the characteristics of that type? (shield volcano; erupts less violently but still dangerous)*
- *Who or what is in danger from volcanic eruptions? (people, property, and wildlife)*

Have students add any new information to their worksheets.

Extending the Learning

Have students check on the real-time status of some of the volcanoes tracked by the USGS by going to the provided online Volcano Status Map.

OBJECTIVES

Subjects & Disciplines

Earth Science

Geography

- Physical Geography

Learning Objectives

Students will:

- define terms
- explain how shield and composite volcanoes are similar and different

Teaching Approach

- Learning-for-use

Teaching Methods

- Discussions
- Multimedia instruction

Skills Summary

This activity targets the following skills:

- Critical Thinking Skills
 - Remembering
 - Understanding
- Geographic Skills

- Acquiring Geographic Information

National Standards, Principles, and Practices

NATIONAL GEOGRAPHY STANDARDS

- Standard 7:

The physical processes that shape the patterns of Earth's surface

NATIONAL SCIENCE EDUCATION STANDARDS

- (5-8) Standard D-1:

Structure of the earth system

Preparation

What You'll Need

MATERIALS YOU PROVIDE

- Paper
- Pencils
- Pens

REQUIRED TECHNOLOGY

- Internet Access: Required
- Tech Setup: 1 computer per classroom, Projector, Speakers
- Plug-Ins: Flash

PHYSICAL SPACE

- Classroom

GROUPING

- Large-group instruction

BACKGROUND & VOCABULARY

Background Information

Volcanoes are natural hazards in many parts of the world, and throughout human history. Different types of volcanoes erupt in different ways. Geologists usually group volcanoes into four main types: cinder cones, composite volcanoes, shield volcanoes, and lava domes. You can learn about some of the different types of volcanoes in order to understand the dangers of volcanoes.

Prior Knowledge

Recommended Prior Activities

- [Volcanic Eruptions](#)

Vocabulary

Term	Part of Speech	Definition
composite volcano	<i>noun</i>	steep volcano made of hardened lava, rock, and ash. Also known as a stratovolcano.
lava	<i>noun</i>	molten rock, or magma, that erupts from volcanoes or fissures in the Earth's surface.
magma	<i>noun</i>	molten, or partially melted, rock beneath the Earth's surface.
shield volcano	<i>noun</i>	large, gently sloping volcano made from fluid lava.
stratovolcano	<i>noun</i>	steep volcano made of hardened lava, rock, and ash. Also known as a composite volcano.

For Further Exploration

Websites

- [PBS: Savage Earth—Out of The Inferno: Volcanoes](#)
- [USGS: Volcano Hazards Program—Types of Volcano Hazards](#)

- National Geographic: Forces of Nature



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