

# Mountains of Fire

by Lily Richardson

## Overview

*This book describes volcanoes and explains what happens when they erupt.*

### Literacy Focus *Word Count: 153 words*

#### High Frequency Words

come, hot, sky, top,  
when, will

#### Content Words

erupting, volcano, mountain,  
fire, smoke, ash, rock, crust,  
mantle, magma, core, vent,  
gases, erupts, lava

#### Reinforcing Decoding Skills

- **Word Endings:** -es  
(volcanoes, gases)
- **R-Controlled Vowel Sounds:**  
/ôr/ (pour, forms, core)

- **Vowel Diphthongs:** ou  
(mountain, out)

#### Print Conventions

- **Punctuation:** Commas

#### Comprehension/Thinking Skills

- Using illustrations to understand text
- Making inferences
- Identifying main ideas

#### Text Features

- Diagrams
- Glossary
- Labels

#### Writing/Speaking and Listening

- Labeling a diagram
- Describing a volcano eruption
- Listening to a description

#### Observe/Assess

See Retellings  
on page 170.

### Science Focus

#### Content and Thinking Skills

- Recognizing characteristics of Earth that contribute to the formation of volcanoes
- Understanding what happens when a volcano erupts

#### Background Information

Many volcanoes are mountains formed by the buildup of lava and other materials that erupt from vents in Earth's crust. Magma from a volcano forms 50 to 100 miles beneath the Earth's surface. Magma that flows out of a volcano is called lava and may be as hot as 2012°F. Dust, ash, rocks, and gases can also erupt from an active volcano.

#### Correlation to National Standards

Earth and Space Science

- Properties of Earth Materials

See Standards Chart on page 216.

## Literacy Focus

### Set the Scene

Ask children to name and describe mountains they have seen. Then ask:

*What is a volcano?*

### Read and Discuss

#### Cover and Title Page

Show children the book and read the title and author's name. Have children look at the cover and title page pictures and tell what they think the title *Mountains of Fire* might mean.

#### Pages 2–13

Read the text with children. Repeat the words *crust*, *mantle*, *magma*, and *core* and have children define each in their own words. Review all diagrams and labels. Ask:

*Do you think it would be safe to get close to an erupting volcano? Why or why not?*

*What happens when lava cools?*

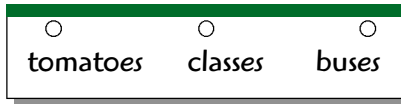
#### Pages 14–16

Read the text with children. Ask:

*Why do you think scientists want to figure out when a volcano will erupt again?*

### Respond

- Write the words *volcano* and *gas* on the board. Point out that for some words that end in a vowel or the letter *s*, *-es* is added to the word to make it mean “more than one.” Have children write the plural form of *volcano* and *gas* and then of *tomato*, *class*, and *bus*.



- Point out the words *pour*, *forms*, and *core* in the text and have children say them, emphasizing the /ôr/ sound. Have children say additional words with /ôr/, such as *more*, *shore*, *four*, and *soar*.

- Say the word *mountains*. Write the words *out*, *root*, *note*, *about*, and *round* on the board. Ask volunteers to read each word and tell if it has the same vowel sound as the first syllable of *mountains*.



#### Details

##### Activity Master, page 80

Have children complete the Activity Master, page 80, by labeling the diagram and answering the question.



#### English Language Learners

Call attention to the word *layers* on pages 4 and 12. Illustrate the word's meaning by displaying a pile of papers and books or a picture of a layer cake.

## Science Focus

### Science Concept

When volcanoes erupt, magma from within Earth moves Earth's surface. Rocks, ash, and gases can also be sent into the air when volcanoes erupt.

### Activities

#### Volcano Diagram

Have children create a diagram of a volcano. Have them show and label the vent, magma, and lava.

#### World Volcanoes

Have children work in groups to find facts about some of the world's volcanoes: Mount St. Helens, Vesuvius, and Kilauea. Have them report on the history of each volcano.

#### Volcano Model

Help children use clay or papier-mâché to make a model of a volcano. Put baking soda in a hole in the middle of the model and pour in vinegar to simulate an eruption.

#### Erupting Volcanoes

Have children draw and color a picture of a volcano erupting. Encourage them to write or tell about what it would be like to be near an erupting volcano.



#### Volcanic Eruption

##### Activity Master, page 81

Have children complete the Activity Master, page 81, by putting the sentences in the correct order.

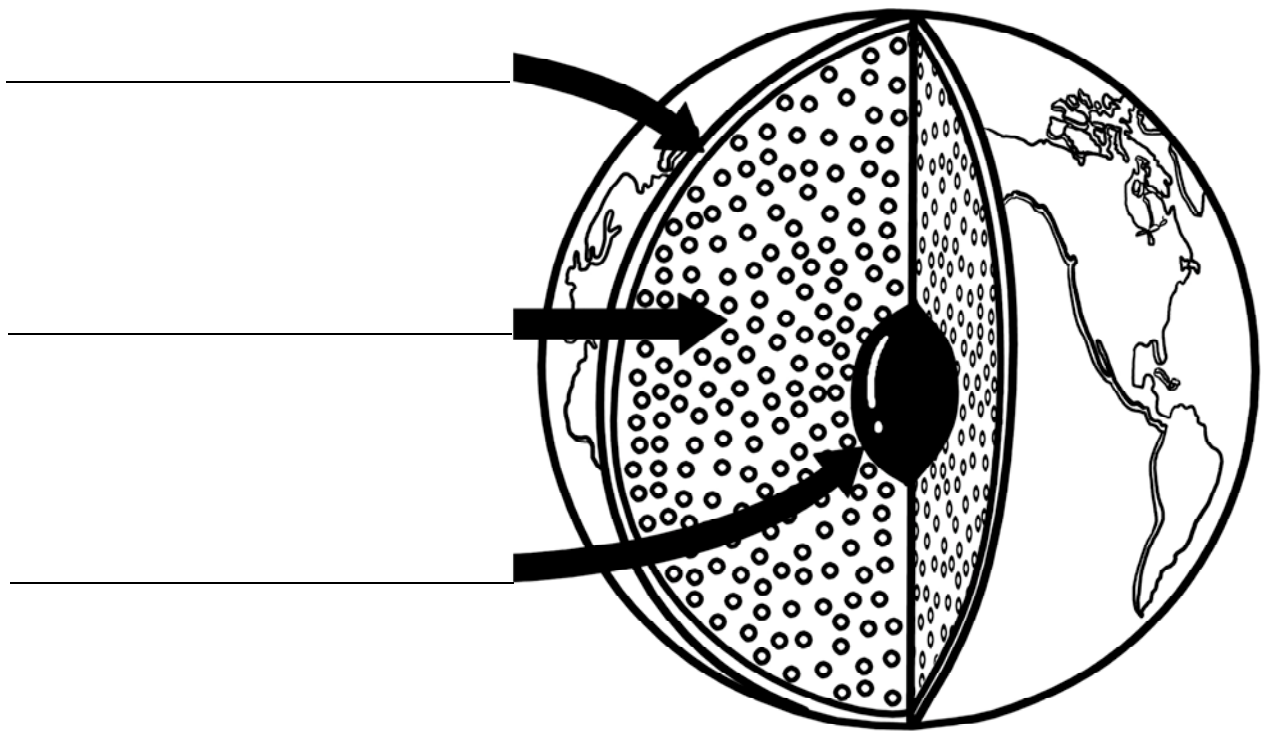
Name \_\_\_\_\_

## Mountains of Fire

Use the words in the Word Bank to label the diagram of Earth's layers. Then answer the question.

### Word Bank

<b>mantle</b>	<b>core</b>	<b>crust</b>
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**What do Earth's layers have to do with volcanoes?**

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Name \_\_\_\_\_

## **M o u n t a i n s   o f   F i r e**

Cut out the events that take place in a volcanic eruption and paste them in the order they happen.

**1.**

**2.**

**3.**

**4.**



**Lava cools.**

**Magma flows out of a vent.**

**Hard lava builds up around a volcano.**

**Magma rises from Earth's crust.**