

Teaching with

# Don't Blow Your Top

A Look Inside Volcanoes

## Preview

- Read the title, including the subtitle.
- Have students use the title and cover illustration to predict the focus of the book. Ask them to support their predictions by stating clues (details) in the title and illustrations. Prompt them to flip through a few pages in the book for additional support.

## Prepare

- Discuss with students how to navigate the text. For example, suggest that they read the main text first on each page, then closely examine the picture and any special features (e.g., “It’s a Fact”). Remind them to think about how these special features illustrate the text, clarify ideas, or add new information.
- Have students browse the book, noticing any special features. Ask them to generate questions they have about volcanoes that might be answered in the text.
- Activate prior knowledge by having students turn to a partner and name 2-3 facts they know about volcanoes.

## Vocabulary

- **Academic Vocabulary** Preteach the following academic words using the Define-Example-Ask Routine: *monitor*, *tremble* (*trembling*).

**Define:** *Monitor* means “to watch closely for the purposes of controlling or keeping track of something.”

**Example:** *We monitored the plant each week to record how much it had grown.*

**Ask:** *What have you monitored in school or at home?*

**Define:** *To tremble* means “to shake in a way that you can’t control.”

**Example:** *It was so cold outside that my body began to tremble.*

**Ask:** *What has made you tremble—cold, fear, earthquake, or something else? Explain.*

- **Additional Words** Use a student-friendly definition, the illustrations, and context clues to highlight these words and phrases while reading: *growled*, *clenched*, *calm*, “*blow your top*,” *volcanologist*, *volcanic*, *summit*, *crater* (definition on page 27), *chamber*, *pressure*, *eruption*, *vents*.

## Close Reading

Guide students through a reading of the book to increase overall comprehension and develop generalizable reading skills.

**Text-Based Questions** Ask the following questions while reading. Have students provide evidence in the text and illustrations to support their answers.

**(page 8)** *Why did the author use the phrase “don’t blow your top”? How does that relate to the book’s topic?*

**(page 11)** *Who is the man standing on the rocks? Why is he there? How do you know?*

**(page 12-13)** *What does the author want you to know about volcanoes? What did the author use to highlight these important facts?*

**(page 14)** *How does Kayla feel about the information she has just learned about volcanoes? How do you know?*

**(page 16)** *What clues does the author give to help you figure out the meaning of the word “rappelled”?*

**(page 17)** *What is causing the rumbling? What clues does the author give in the text and illustrations?*

**(page 19)** *What additional information does the author want you to know about volcanoes? How does the main text compare to the “It’s a Fact” feature? Why did the author include it?*

## Reinforce Vocabulary

- **Content Vocabulary** After reading, review the following content words using the glossary on page 31: *fissure, magma, mantle, pyroclastic, tectonic plates*. Have partners read each word and definition, then find the sentence in the book containing the word.
- **Build Vocabulary Strategies** Increase student’s general word awareness skills using the following words: *explode, exhale, lava*.

**explode, exhale (prefixes):** Write the two words and underline the prefix ex-. Explain that a prefix is a word part added to the beginning of a base word. It changes the word’s meaning. Readers use the meaning of the prefix to determine the whole word’s meaning. Point out that ex- means “out.” For example, an EXIT door is the door you go out of to leave a building. Guide children to use the meaning of ex- to figure out the meanings of explode (to burst out) and exhale (to breathe out).

**lava (context clues):** Explain that authors give clues, such as definitions, in a sentence or the sentences surrounding a word to help readers figure out the word’s meaning. Read the second paragraph on page 22, and ask students to listen for clues to the meaning of the word lava. Point out that the author gives the definition of lava in the second sentence to make sure readers understand what it is. The words “is called” are a clue that a definition is being provided.

**Use the Tools** Discuss why the author included each of these nonfiction tools and how students can use them to better understand the text.

- **Diagram** Have students find the diagram on page 26 and carefully read the labels. Guide them to find the diagram topic ("cross section through a volcano" underneath the page heading). Ask: *Why did the author include this diagram? How does it help you understand how a volcano erupts? How does it clarify the difference between magma and lava?* Remind students that when they encounter a diagram they should (1) read the title, (2) read any introduction to the diagram, and (3) examine each label and callout, which identifies the parts of the diagram. Then they should think about what they learned from the diagram and how it relates to the main text.
- **Boldfaced Words** Explain to students that authors use special type, such as **boldface**, *italics*, or **words in color** to highlight important new vocabulary or terms in the text and draw the reader's attention to them. Use the boldfaced words on pages 28 and 30 to model how to use this text feature. Guide students to understand the importance of the terms on page 28 and how they are defined in the text. Point out that the boldfaced words on page 30 are the names of famous volcanoes. Have students find other boldfaced words in the book. Ask: *Why did the author write these words in special type?*

**Imagine This!** Build comprehension using the interactive game. Share with students the directions below. **Alternate:** Divide the class into teams to play; the members may help each other and the first team to reach WINNER space wins.

**Players:** 2

**Materials:** plastic cup, penny, place marker for each player

**To Play:**

- 1 Each player in turn shakes the penny in the cup, then spills it out. If the penny lands on heads, the player moves 1 space. If it lands on tails, the player moves 2 spaces.
- 2 The player then answers the question. If correct, the player stays on the space. If incorrect, the player skips a turn. Players landing on a penalty square only incur the penalty once, even if they land on the square again. Also, players can challenge their opponent's answer, then check the book to confirm.
- 3 Each player continues in turn. The first player to reach the WINNER space wins.

## Extend

- **Make a Volcano** Provide materials for students to make volcanoes (e.g., modeling clay, empty can, and cardboard or wax paper base) and experiment with volcanic eruptions (e.g., using baking powder and vinegar). See <http://www.wikihow.com/Make-a-Volcano> for step-by-step directions.
- **Research It** Have students use the books or web sites on page 32 to learn more about volcanoes. Suggest they create a 3-D representation of a volcano with a fact sheet attached.



**START**

What does a volcanologist study?

What do you call hot, melted rock deep in the earth?

**True or False?**  
The U.S. is the only place that has volcanoes.

**Oh-oh, fissure ahead!**  
Go back 1 space.

Is **lava** hot or cold?

What's another word for **erupt**?



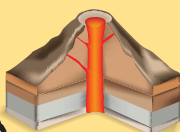
**Run! Volcano erupting!**  
Take an extra turn.

Is it safe to be near **magma**?  
Why or why not?

**Don't blow your top!**  
Calm down.  
Miss a turn.



Name one of the layers of the Earth.



What feeling makes a person "blow her top"?

**Hear that rumble?**  
Move ahead 1 space.

What's another word for **fissure**?

Name two places where volcanoes are found.

What word means "slabs of rock under the ocean"?



What's the sound of a volcano about to erupt?

**Follow the volcanologist.**  
Take an extra turn.

**True or False?**  
Volcanoes are found only on land.

**Rocks flying!**  
Take cover!  
Go back 1 space.

What color is **magma**?

**Danger! Lava flow!**  
Miss a turn.



Is the summit at the top or bottom of a mountain?

Around which ocean is the Ring of Fire located?

**Ground trembling!**  
Miss a turn.

Why is a volcanologist's job important?

What's the hot rock called that flows down a mountain?

**WINNER**

**Imagine That!™**