

About the Book

Text Type: Nonfiction/Informational Page Count: 20 Word Count: 1,475

Book Summary

Volcanoes is a factual text that describes how different kinds of volcanoes are formed and how they behave. The book gives details about some of the more famous volcanoes, including Mount Vesuvius, Mount St. Helens, Mauna Loa, and Mount Fuji. Photographs, maps, and diagrams support this informative text.

Book and lesson also available at Levels V and Z.

About the Lesson

Targeted Reading Strategy

- Summarize

Objectives

- Summarize to understand the text
- Identify the main idea and details
- Identify and use commas in a series
- Identify synonyms and antonyms

Materials

Green text indicates resources are available on the website.

- Book—**Volcanoes** (copy for each student)
- Chalkboard or dry-erase board
- World map
- Dictionaries
- **Main idea and details, commas in a series, synonyms and antonyms worksheets**
- **Discussion cards**



Indicates an opportunity for students to mark in the book. (All activities may be demonstrated by projecting the book on an interactive whiteboard or completed with paper and pencil if the books are reused.)

Vocabulary

*Bold vocabulary words also appear in a pre-made lesson for this title on VocabularyA-Z.com.

Content words:

Story critical: **crater** (n.), **dormant** (adj.), **lava** (n.), **magma** (n.), **plates** (n.), **surge cloud** (n.)

Enrichment: **caldera** (n.), **cinders** (n.), **collapsed** (v.), **composite volcanoes** (n.), **extinct** (adj.), **geysers** (n.), **shield volcanoes** (n.), **vent** (n.)

Before Reading

Build Background

- Write the word **volcanoes** on the board. Ask students to tell what they already know about volcanoes. Show students the cover of the book and ask them what they see.
- Show students the world map and point out the mountainous regions. Ask a volunteer to tell where in the world he or she thinks volcanoes are located. Talk about the possible dangers associated with humans and wildlife inhabiting the land around volcanoes.

Preview the Book

Introduce the Book

- Give students their copy of the book. Guide them to the front and back covers and read the title. Have students discuss what they see on the covers. Encourage them to offer ideas as to what type of book it is and what it might be about.
- Show students the title page. Discuss the information on the page (title of book, author's name).
- Ask students to turn to the table of contents. Remind them that the table of contents provides an overview of the book. Ask students what they expect to read about in the book, based on what they see in the table of contents. (Accept all answers that students can justify.)

Introduce the Reading Strategy: **Summarize**

- Explain to students that one way to understand and remember information in a book is to write a summary, or a brief overview of the most important information in the text. Point out that a summary includes the main idea and one or two supporting details. It often answers the questions *who, what, when, where, why, and how*.
- Model how to summarize.
Think-aloud: As I read this book, I am going to stop every now and then to remind myself about the information I have read so far about volcanoes. Doing this helps me remember what I'm reading and makes me think about new information. When I finish reading the book, I will be able to tell, in my own words, some of the information from each section about volcanoes that I have read.
- As students read, encourage them to use other reading strategies in addition to the targeted strategy presented in this section.

Introduce the Comprehension Skill: **Main idea and details**


- Explain that sometimes the amount of information about a topic is so large that it is grouped into sections, and each section of the book has its own main idea.
- Write the following list of words on the board: *volcanic mountains, plains, valleys, and oceans*. Ask students to describe what these words refer to (landforms). Point out that the definitions of these words help to identify a main idea. (Many different landforms make up the topography of the world.) The words *volcanic mountains, plains, valleys, and oceans* are details that support this main idea.
- Model using the table of contents to infer supporting details in the text.
Think-aloud: When I look at the table of contents on page 3, I see that the word Eruption is part of a section title. I already know that volcanoes erupt, so what happens when they erupt is probably a supporting detail in the book. When I read, I know that I will find out even more details about volcanoes. As I read, I will pause after every few pages to review in my mind the important details. This strategy will help me make sure I understand what I'm reading. I know that engaged readers do this when they read, so I am going to look for supporting details as I read this book.
- Have students turn to the table of contents and list some of the supporting details about volcanoes (Vesuvius, Composite, Lava Domes, and so on).

Introduce the Vocabulary

- Write the following words from the content vocabulary on the board: *dormant, crater, and lava*.
- Point out that these three words can be found in the text and that knowing what they mean will help students understand what's happening as they read the book. Place students into small groups and give each group three pieces of blank paper. Ask them to write one of the three vocabulary words on each page. For each word, have them write or draw what they know about the word. Create a definition for each word using students' prior knowledge.
- Model how students can use the glossary on page 20 to find the definition of a word. Ask students to locate the word *dormant* in the glossary and compare this definition to their prior knowledge of the word.


- Model how students can use a dictionary to find a word's meaning. Have them locate the word *dormant* in the dictionary. Invite a volunteer to read the definition for *dormant*. Invite students to compare the dictionary definition to the definition found in the glossary.
- Have students follow along on page 4 as you read the first paragraph in which the word *dormant* is found to confirm the meaning. Repeat the exercise with the remaining vocabulary words.




Set the Purpose

-  Have students read the book to find out more about volcanoes. Encourage them to underline or write on a separate piece of paper the important details in each section.

During Reading

Student Reading

-  **Guide the reading:** Have students read to the end of the first paragraph on page 7 (finishing the section). Ask them to remember to underline the important details as they read. Encourage students who finish before everyone else to go back and reread.
- Model identifying the main idea and details.
Think-aloud: *As I read the first section, I noticed that most of the sentences mentioned something about the eruption of Mount Vesuvius. I read that a huge explosion shook the ground in Pompeii on August 24, AD 79. I will underline this information in the book. I also read that dust, ash, and lava poured from the volcano, destroying everything in its path. Buildings collapsed, and people died as they tried to flee. Eleven hours later, surge clouds fell down the mountain at speeds of 310 mph, and within moments, all of the people of Pompeii and Herculaneum were burned and buried by dust and ash. When the eruption ended, two cities were completely gone. I will underline all of this information as well. Based on what I've read and underlined, I think the main idea of the section is: When Mount Vesuvius erupted in AD 79, the results were catastrophic. Eleven destructive hours after erupting, two cities were completely buried and wiped off the face of the Earth.*
- Write the main idea on the board. Ask students to identify details that support this main idea. (Page 4: Roman city of Pompeii; thought Mount Vesuvius was dormant or extinct; volcanic mountain was covered in trees, flowers, and grass; August 24, AD 79; 1:00 pm; a huge explosion; dust, ash, and melted rock blew out of the top, raining down on the city; landed as far away as 10 mi from the mountain; 3:00 pm, lava flowed, destroying all in its path; 6:00 pm, the cloud of dust was 20 mi high; buildings collapsed. Page 5: people tried to flee; many died as they tried to walk through the deep, hot ash; stones fell and killed others; some choked to death; 12:00 am, a poisonous cloud collapsed, falling down the mountain at 310 mph. Page 6: surge cloud buried Pompeii and Herculaneum within moments; more surge clouds followed; two cities were completely buried and wiped off the face of the Earth; not uncovered again for more than one thousand years.) Write these details on the board.
- Model summarizing the main idea and details from the first section.
Think-aloud: *To summarize, I decide which information is most important to the meaning of a section. To do this, I can identify the main idea and important details and then organize that information into a few sentences. When I look at the main idea and details on the board, a summary of this section might be: In AD 79, the people of Pompeii thought beautiful Mount Vesuvius was dormant. But that year, its eruption caused catastrophic results—lava, hot ash, stones, and poisonous gas that destroyed all life. The powerful surge clouds that followed eleven hours after the eruption completely buried the two cities of Pompeii and Herculaneum. They were not uncovered again for more than one thousand years.*
- Write the summary on the board. Have students identify the main idea and details within the summary. Discuss how you used your own words to create the summary.

-  **Check for understanding:** Have students read the section titled “Where and Why Volcanoes Form” from pages 7 through the first paragraph on page 11. Invite them to share the important details they underlined in this section titled “Where and Why Volcanoes Form.” Write these details on the board. Divide students into groups and have them work with their group to identify the main idea from the details of the section. Discuss their responses as a class and write a main idea on the board.
- Ask each group to use the main idea and details of the section to write a brief summary on a separate piece of paper. Have them share what they wrote.
-  Ask students to read the remainder of the book. Remind them to continue to underline important details in the book as they read. Add these to the board once everyone has finished reading.
-  Have students make a question mark in their book beside any word they do not understand or cannot pronounce. Encourage them to use the strategies they have learned to read each word and figure out its meaning.

After Reading

- Ask students what words, if any, they marked in their book. Use this opportunity to model how they can read these words using decoding strategies and context clues.

Reflect on the Comprehension Skill

- Discuss how stopping to review the important details helped students remember the facts and better understand the information in the book.
- Invite students to share the important details they underlined for the section “Composite Volcanoes.” Write these details on the board. Divide students into small groups. Have each group work together to identify the main idea from the details and write this information on a separate piece of paper. Discuss their responses as a class.
- **Independent practice:** Introduce and explain the [main-idea-and-details worksheet](#). Have them write the main idea and supporting details for the section titled “Shield Volcanoes.” Encourage them to also include information from the captions. If time allows, discuss their responses.

Reflect on the Reading Strategy

- Review with students how the main idea and details from each section can be used to develop a summary. Discuss with them the benefits of summarizing information they read (to understand the main point of a larger piece of writing). Invite students to share instances of when summarizing might be helpful.
- Review the details written on the board from the section titled “Composite Volcanoes.” Invite students to return to their small groups. Have each group work together to write a summary for this section on a separate piece of paper. Discuss their responses as a class.
- **Independent practice:** Have students complete their main-idea-and-details worksheet by writing a summary for the section titled “Shield Volcanoes.” If time allows, discuss their responses.
- **Enduring understanding:** People have been both drawn to volcanoes and terrified by them throughout history. Scientists have studied volcanoes extensively, and people are now better able to understand them—and can even predict eruptions. Now that you know this information, how does it help you to appreciate the advances of modern science?

Build Skills

Grammar and Mechanics: Commas in a series

- Review or explain that whenever a list of three or more items is made, a comma must be placed between the items. Without the commas, the sentence would be difficult to read and understand. Listed items can be nouns, verbs, adjectives, or entire phrases or clauses. Remind students that this is only one of the many uses of commas.
- Write the following sentence on the board: *The volcanic mountain was covered with trees flowers and grass.* Ask students to explain why this sentence doesn't make sense (there is no such thing as trees flowers, the sentence doesn't make sense). Direct students to page 4 and ask students to identify this sentence in the text. Ask students to locate the commas in the sentence and have a volunteer add the commas to the sentence on the board. Point out that the word *grass* is joined to the list by the word *and* following the comma.
- Have students follow along on page 4 as a volunteer reads the following sentence aloud: *Dust, ash, and melted rock blew out of the top of the volcano, darkening the sky.* Point out the words in the list (*dust, ash, melted rock*). Talk about the location of the commas within the list. Point out that the sentence makes much more sense with the correct punctuation.



Check for understanding: Have students turn to page 5. Ask them to find a series of words or phrases that is separated by commas (*massive cloud of ash, poisonous gas, glowing-hot dust, and smoke*). Ask them to circle the commas and notice that the last item is joined to the list by the word *and* following the comma.

- **Independent practice:** Introduce, explain, and have students complete the [commas-in-a-series worksheet](#). If time allow, discuss their responses.

Word Work: Synonyms and antonyms

- Write the word *huge* on the board. Ask students to suggest a word that means almost the same thing (*large, gigantic*). Review or explain that a word that means the same or almost the same as another word is called a *synonym*. Ask students to suggest a word that means the opposite of *huge* (*small, tiny*). Review or explain that a word that means the opposite of another word is called an *antonym*.
- Have students turn to page 4. Write the following sentence on the board: *Most people thought Mount Vesuvius was dormant or extinct.* Underline the word *dormant*. Ask students to suggest a word that means the same or almost the same as *dormant* (*inactive*). Ask them to suggest a word that means the opposite of *dormant* (*active, lively*).
- Show students a thesaurus. Use the example above to explain how a thesaurus is used. Write the synonyms and antonyms for *dormant* on the board.
- **Check for understanding:** Give pairs of students a thesaurus. Ask them to find the word *extinct* and have them name the synonyms listed. If the thesaurus lists antonyms, have them find the antonyms for *extinct*. If needed, provide additional practice using a thesaurus.
- **Independent practice:** Introduce, explain, and have students complete the [synonyms-and-antonyms worksheet](#). If time allows, discuss their answers.

Build Fluency

Independent Reading

- Invite students to read their book independently. Additionally, invite partners to take turns reading parts of the book to each other.

Home Connection

- Give students their book to take home to read with parents, caregivers, siblings, or friends. Have them practice summarizing different sections of the book with someone at home.

Extend the Reading

Informational Writing and Art Connection

Have students use the Internet to research one of the following volcanoes: Mount Fuji, Mount Rainier, or Mauna Loa. Have them identify the following information about the volcano they choose: its size, location, the type of volcano, the characteristics it displays, whether it is still active, when it last erupted, and what happened during its last eruption. Have students present the information in a written report. Explain that the report should include an introduction and conclusion. Encourage students to add photographs or illustrations to their work.

Visit WritingA-Z.com for a lesson and leveled materials on expository writing.

Science Connection

Locate an instructional video that shows active volcanoes and explains the chemical reactions that take place when a volcano erupts. Have students watch for an explosive composite volcanic eruption, a gentle but powerful shield volcanic eruption, and a small, brief eruption of a cinder cone volcano. Have them journal their findings, recording what they observed in each eruption. Discuss the differences aloud with the class when finished.

Skill Review

Discussion cards covering comprehension skills and strategies not explicitly taught with the book are provided as an extension activity. The following is a list of some ways these cards can be used with students:

- Use as discussion starters for literature circles.
- Have students choose one or more cards and write a response, either as an essay or as a journal entry.
- Distribute before reading the book and have students use one of the questions as a purpose for reading.
- Conduct a class discussion as a review before the book quiz.

Assessment

Monitor students to determine if they can:

- correctly identify the main idea and supporting details to better understand the text during discussion and on a worksheet
- accurately use main-idea statements and supporting details to write a summary during discussion and on a worksheet
- correctly identify and use commas in a series in the text and on a worksheet
- accurately identify and use synonyms and antonyms during discussion and on a worksheet

Comprehension Checks

- **Book Quiz**
- **Retelling Rubric**