



About the Book

Text Type: Nonfiction/Informational Page Count: 20 Word Count: 1251

Book Summary

Polar bears are among the most majestic and unique creatures on Earth. But their existence is threatened, not by other animals or the harsh conditions in which they live, but by humans. In this book, readers learn how humans are endangering these beautiful animals, even from thousands of miles away.

About the Lesson

Targeted Reading Strategy

- Summarize

Objectives

- Summarize to understand text
- Understand and identify cause-and-effect relationships
- Identify and use hyphenated compound adjectives
- Identify and use homophones

Materials

Green text indicates resources available on the website

- Book—*Plight of the Polar Bear* (copy for each student)
- Chalkboard or dry erase board
- Cause and effect, hyphenated compound adjectives, homophones worksheets
- Discussion cards



Indicates an opportunity for students to mark in the book. (All activities may be demonstrated by projecting book on interactive whiteboard or completed with paper and pencil if 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: **global warming** (n.), **migrate** (v.), **plight** (n.), **pollutants** (n.), **thrive** (v.), **toxic** (adj.)

Enrichment: **fast** (v.), **ingest** (v.), **inhabitant** (n.), **inhospitable** (adj.), **insulate** (v.), **lichens** (n.), **poses** (v.), **prey** (n.)

Before Reading

Build Background

- Create a concept web on the board with the words *Polar Bears* in the center. Discuss with students what they know about polar bears, such as where they live, what they eat, and what they look like. Write students' ideas in the concept web on the board.

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 what the book is about. Ask students what they expect to read about 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 a section. Point out that a summary often answers the questions *who*, *what*, *when*, *where*, and *why*.
- Create a chart on the board with the headings *Who*, *What*, *When*, *Where*, and *Why*. Read page 4 aloud to students and model summarizing.
Think-aloud: To summarize, I need to decide which information is the most important to remember in a section. To do this, I can consider who and what the section was about, what happened, and when and why it happened. Then I can organize that information into a few sentences. This section is mostly about the Arctic. The author explains that the Arctic is snow-covered tundra that is almost completely lacking in life. I will write Arctic, tundra, and no life under What. The description of the Arctic as a harsh, unwelcoming place helps to explain why there is little life found in the Arctic. I will write harsh, unwelcoming place under the heading Why. The Arctic is located in the far north. I will write far north under the heading Where. When I organize all of this information, a summary of the introduction might be: The Arctic is snow-covered tundra in the far north. Few living things survive there because of the harsh environment.
- Write the summary on the board. Discuss how you used the information in the chart, along with your own words, to create a summary.
- As students read, encourage them to use other reading strategies in addition to the targeted strategy presented in this section.

Introduce the Comprehension Skill: **Cause and effect**

- Explain to students that ideas and events are often connected to each other. One thing causes, or makes, something else happen. Review or explain that a *cause* is an event that makes something happen, and the *effect* is what happens because of, or as a result of, the event.
- Write the following sentence on the board: *I hit a baseball through a window.* Model identifying cause-and-effect relationships.
Think-aloud: When I hit the baseball through a window, certain events might have caused that to happen. I might have swung too late or may have been playing too close to the house. (Write these statements in the first two boxes on board.) There will be effects of breaking the window. I might have to pay for the window. I also might have to apologize for breaking the window. Sometimes more than one effect, or event, happens as a result of a cause.
- Ask students to identify from the discussion the two effects that might happen as a result of hitting a baseball through the window (paying for the window, apologizing for breaking the window). Write these on the board.
- Invite students to share other possible effects for hitting a baseball through the window.

Introduce the Vocabulary

- Write the following words from the content vocabulary on the board in order: *global warming*, *plight*, *pollutants*, *toxic*.
- Give groups of students four pieces of blank paper. For each word, have them write or draw what they know about the word. Invite a volunteer from each group to share their definition for each word. Create a definition for each word using students' prior knowledge.

Lesson Plan *(continued)*

Plight of the Polar Bear

- Review or explain that the glossary and dictionary contain lists of vocabulary words and their definitions.
- Model how students they can use the glossary or a dictionary to find a word's meaning. Have students locate the glossary at the back of the book. Invite a volunteer to read the definition for *global warming* in the glossary. Have students compare the definition with their prior knowledge of the word. Then have students follow along on page 12 as you read the sentence in which the phrase *global warming* is found to confirm the meaning of the word. Repeat the exercise with the remaining vocabulary words.

Set the Purpose

- Have students read to find out about polar bears, stopping after each section to mentally summarize their reading and reflect on the causes and effects of polar bears' endangerment.

During Reading

Student Reading

- **Guide the reading:** Have students read from page 5 to the end of page 7. Encourage those who finish before others to reread the section.
- Model summarizing important information in the second section, "Tundra: Summer Versus Winter."
Think-aloud: *I made sure to stop reading after the second section to summarize what I'd read so far. First, I thought about the information that answered the questions who, what, when, where, and why. Then, in my mind, I organized the important information into a few sentences. In this section, I learned that the temperature of the Arctic tundra in the winter stays below freezing, the soil remains frozen, and there are no trees or hills to slow down the cold winds. I underlined winter, freezing, soil frozen, and cold winds. I also learned that in the summer, the sun is up most of the time, and it warms up just enough for small plants to grow and for animals to return. I underlined summer, above freezing, and birds and mammals return.*
- Write the underlined information in the chart on the board. Have students share any additional information they underlined that answers the questions *who, what, when, where, and why*. Write this information on the chart. Create a summary with students based on the information in the chart. (*The Arctic tundra has a winter and a summer. In winter, below-freezing temperatures create cold winds and frozen ground. In summer, temperatures rise, small plants grow, and animals return.*)
- Create a two-column chart on the board with the headings *Cause* and *Effect*. Have students turn to page 5 in the book. Write *the temperature in the tundra is extremely low—well below freezing* under the *Cause* heading and *soil frozen* under the *Effect* heading. Point out how low temperatures in the tundra during winter cause the soil below the surface to remain frozen.
- Ask students to identify any other effects that result from low temperatures (cold winds, ice and snow-covered land). Write these effects in the chart on the board.
- Introduce and explain the [cause-and-effect worksheet](#). Ask students to write the information from the board on their worksheet.
- Have students write the following cause on their worksheet: *the average summer temperature remains above freezing*. Have them turn to page 6 in their book and work with a partner to identify at least two effects of this cause (snow melts, plants grow, insects hatch, birds and mammals migrate there). Have them write this information on their worksheet. Discuss their responses.
- **Check for understanding:** Have students read pages 8 through 11 in their book. Remind them to underline information that answers the questions *who, what, when, where, and why* while reading. Divide students into groups. Have each small group write a brief summary of the section on a separate piece of paper. Have them share and discuss their summaries.

Lesson Plan *(continued)*

Plight of the Polar Bear

- Write the following causes on the board: *polar bears have waterproof fur, polar bears have white fur*. Ask students to use the text to identify an effect of each cause (*helps them stay warm when swimming; helps them blend in with the snow, makes it easier to stalk prey*). Have them write this information on their cause-and-effect worksheet. Discuss their responses.
- Have students read the remainder of the book. Have them underline information in each section that answers the questions *who, what, when, where, and why*.



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 Reading Strategy

- Divide students into pairs. Assign each pair one of the remaining sections from the book ("Shrinking Ice," "Other Problems"). Remind them to underline information that answers the questions *who, what, when, where, and why* while reading. Have each group discuss the information they underlined in their section. Have them use the information to write a group summary of the section. When students have finished, share and discuss their summaries aloud.
- **Think-aloud:** *I know that summarizing keeps me actively involved in what I'm reading and helps me remember what I've read. I know that I will remember more about polar bears and their plight because I summarized as I read the book.*

Reflect on the Comprehension Skill

- **Discussion:** Review with students the information on their cause-and-effect worksheet. Point out that some causes lead to more than one effect. Ask students to identify an event that happened as a result of more and more pollutants being released into the atmosphere each year (the Earth is getting warmer). Have them write the cause and its effect on their worksheet.
- **Independent practice:** Write the following cause in the chart on the board: *warmer temperatures on Earth*. Have students complete the cause-and-effect worksheet by identifying at least two effects for this cause. If time allows, discuss their responses.
- **Enduring understanding:** In this book, you read about the threats to polar bears and how humans' actions are affecting their existence. Now that you know this information, why is understanding the plight of polar bears important and what are some things you can do to help faraway animals in danger?

Build Skills

Grammar and Mechanics: Hyphenated compound adjectives

- Write the following sentence on the board: *The girl wore a red dress*. Have a volunteer come to the board and circle the word that describes the dress in the sentence (*red*).
- Review or explain that *adjectives*, such as *red*, are words that describe nouns or pronouns and tell *which one, how many, or what kind*. Ask a volunteer to underline the noun that the adjective describes.
- Write the following sentence on the board: *The tundra is a snow-covered plain*. Underline the word *plain*. Have a volunteer come to the board and circle the word that describes the plain (*snow-covered*). Explain that this word is an example of a *compound adjective*. The line between the words is a *hyphen*. Point out that each part of a compound adjective alone does not describe the noun. For example, it doesn't make sense to describe the plain as a *snow plain* or a *covered plain*, but together the words *snow* and *covered* create a compound adjective that correctly describes the noun.



Check for understanding: Write the following sentence on the board: *Low-growing plants can grow in the summer.* Underline the word *plants*. Have a volunteer come to the board and circle the adjective that describes the plants (*low-growing*). Ask students to discuss with a partner the reasons why each word in the compound adjective could not describe the noun on its own (it doesn't make sense to say a *low plant*; *growing plant* does not carry the same meaning).

- **Independent practice:** Introduce, explain, and have students complete the [hyphenated-compound-adjectives worksheet](#). If time allows, discuss their responses

Word Work: Homophones

- Have students turn to page 9. Read the following sentence aloud: *Their white fur also helps them to blend in with the snow, making it easier for them to stalk their prey.* Circle the word *their*. Ask students to explain what the word refers to (polar bears).
- Write the following sentence on the board: *Despite the tundra's harsh conditions, one inhabitant lives there year round.* Circle the word *there*. Ask students to explain what the word refers to (the tundra).
- Ask students to identify which words in the sentences sound the same but are spelled differently and have different meanings (*their, there*). Write these words on the board. Explain that words that sound the same but are spelled differently and have different meanings are called *homophones*.
- Invite students to share other homophone pairs they may know. Write these pairs on the board.
- **Check for understanding:** Write the homophones *through, threw, one, and won* on the board. Have students use each word in a sentence on a separate piece of paper. Invite them to share their sentences aloud.
- **Independent practice:** Introduce, explain, and have students complete the [homophones worksheet](#). If time allows, discuss their responses.

Build Fluency

Independent Reading

- Allow students to read their book independently. Additionally, partners can 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 discuss with someone at home how to summarize as they read each section.

Extend the Reading

Expository Writing Connection

Have students use the Internet to research another Arctic animal. Have them write a report identifying important information about the animal, such as: what it looks like, what it eats, and what threats it might be facing.

Elements of Nonfiction Connection

Review the photographs used throughout the book. Review the information presented in the caption for each photograph. Discuss with students the purpose of incorporating photographs and captions (to provide clarification and elaboration of information on nearby pages; to draw conclusions about information presented in the main body of the text). Ask students to explain why it might be beneficial to examine and understand photographs and captions in the text as they read.

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.
- Cut apart and use the cards as game cards with a board game.
- Conduct a class discussion as a review before the book quiz.

Assessment

Monitor students to determine if they can:

- accurately use details from the text to create section summaries during discussion and on a separate piece of paper
- correctly understand and identify cause-and-effect relationships in the text during discussion and on a worksheet
- correctly identify and use hyphenated compound adjectives during discussion and on a worksheet
- accurately identify and understand the use of homophones during discussion and on a worksheet

Comprehension Checks

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