



Teaching with

Ice Queen

Exploring Icebergs and Glaciers

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.

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 icebergs and glaciers that might be answered in the text.
- Activate prior knowledge by having students turn to a partner and name how life in an icy region of the world would be different from where they live.

Vocabulary

- **Academic Vocabulary** Preteach the following academic words using the Define-Example-Ask Routine: *frigid*, *massive*.

Define: *Frigid* means "very cold."

Example: *The frigid temperatures in the South Pole make it difficult for people or animals to live there.*

Ask: *How would you dress where it's frigid?*

Define: *Massive* means "very large."

Example: *A glacier is a massive block of ice.*

Ask: *What is something near your home that is massive?*

- **Additional Words** Use a student-friendly definition, the illustrations, and context clues to highlight these words while reading: *carve*, *chill*, *chattered*, *shivered*, *ripples*, *disturbed*, *specks*, *observed*, *waddled*, *moan*.

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 word “chattered” instead of “said”?*

(page 11) *How do the illustrations help you better understand details in the text?*

Give examples.

(page 14) *Why did the author write G-R-O-A-N in a special way? How does that change how you read the text?*

(page 17) *What does the author want us to know about penguins?*

(page 19) *Why did the author include Nora’s thought about ice castles?*

(page 20) *What is the author comparing? Why is it important?*

Reinforce Vocabulary

- **Content Vocabulary** After reading, review the following content words using the glossary on page 31: *calve*, *crevasses*, *krill*. 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: *careful*, *iceberg*.

careful (suffixes): Write the word and underline the suffix *-ful*. Explain that a suffix is a word part added to the end of a base word. It changes the word’s meaning. Readers use the meaning of the suffix to determine the whole word’s meaning. Point out that *-ful* means “full of.” So, *careful* means “full of care.”

iceberg (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 first two sentences on page 18, and ask students to listen for clues to the meaning of the word *iceberg*. Point out that the author wrote “giant ice mountain” in the second sentence to make sure the reader understood what an iceberg is. Repeat using the word *calve* on page 23. Guide students to find the clues in the words and pictures to determine the meaning of *calve*.

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

- **Captions** Ask students to find and read the captions for the photos in the Fact File (pages 26-31). Ask: *Why did the author add captions to the photos? How do they help the reader?* Remind students to read the main text, then carefully examine the photos and read the captions. They should think about how the information in the caption relates to the main text. *Does it directly connect to details in the text or does it add new information?*
- **Maps** Use the maps on page 27 to model how to use this text feature. Point out the callouts/ labels. Guide students to make the connection between the flat map and the place on the round map (globe) to which the arrow points. Ask: *Why did the author include the round map? How does it help the reader? What information do you learn from each map?*

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

- **Ice Experiments** Provide materials for students to experiment with ice. For example, give children ice cubes and have them (1) experiment with different methods to accelerate melting (e.g., place in a sunny spot in the classroom versus in a dark closet) and (2) build structures using ice cubes and salt (to aid in sticking).
- **Travel Brochure** Have students create a South Pole travel brochure. Suggest that they include drawings or photos and the most interesting things they read about icebergs and glaciers.
- **Research It** Have students use the books or web sites on page 32 to learn more about icebergs and glaciers. Suggest they create a numbered list to summarize their key findings.

