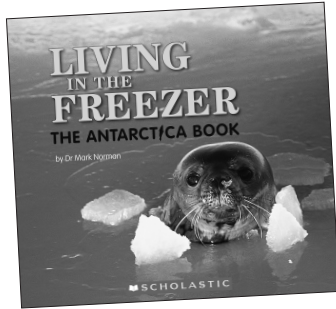


LIVING IN THE FREEZER THE ANTARCTICA BOOK

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TEXT TYPE: Non-fiction: Description—Report
GUIDED READING LEVEL: T

Note: You may want to focus only on a spread or a specific feature of the text rather than covering this non-fiction text in its entirety.

TEXT FEATURES

- table of contents
- glossary and index
- headings and subheadings
- bolded text, different fonts

VISUAL LITERACY

- maps, diagrams, pictures, scale diagrams
- sidebars
- text boxes

TEXT SUPPORTS

- predictable format
- detailed photographs and illustrations
- scale diagram comparisons

POSSIBLE TEXT CHALLENGES

- multi-syllabic words and specialized vocabulary, e.g., ‘crustaceans,’ ‘krill,’ ‘Colossal,’ ‘moult’
- sentence complexity
- diagrams, maps
- names in Latin/Greek
- no pronunciation guide for names (e.g., ‘Weddell,’ ‘Minke,’ ‘Arnoux’s,’ ‘Petrel’)

FOCUS COMPREHENSION STRATEGY

- evaluating

FURTHER COMPREHENSION STRATEGIES

- making connections: text to self, text to world
- synthesizing

ORAL LANGUAGE OPPORTUNITIES

- Place Mat strategy
- Think/Timed-Pair-Share strategy
- discussing with a partner
- discussing with a group
- sharing ideas
- radio interview and ‘call in’ questions (option 3 in Focused Rereading)

WORKING WITH WORDS

- word solving and building: noticing a familiar word embedded within a larger word
- language predictability: using context clues and dictionaries to work out word meanings
- language predictability: rereading to solve unfamiliar words

ASSESSMENT OPPORTUNITIES

Observe each student’s ability to:

- evaluate author’s craft
- state and support opinions, with examples from text
- make connections to what they know about Antarctica
- use visual literacy information to aid in comprehension
- self-monitor and repair comprehension when it breaks down

ASSESSMENT TOOLS

Select from the following:

- Evaluating Strategy Checklist
- Comprehension Strategies Anecdotal Record

First Session (pages 4–17)

BEFORE READING

ESL NOTE: For your ESL students, think about bringing in visuals, e.g., books, pictures, relevant props, toys (if appropriate), to aid in building their prior knowledge and making connections to this region of the world.

Making Connections: Text to Self and Text to World

Predicting

Inferring and Evaluating

Word Solving and Building and Language Predictability

Activate and build prior knowledge

- Tell students that this text is about some of the life found in Antarctica. Ask students to share their knowledge of Antarctica. Elicit information from students about what animals might live there, what they think the climate and landscape are like, and so on. Remind them to think about books they might have read or movies they might have seen about life in Antarctica ('March of the Penguins,' for example). Ask students to form groups of 4 and individually write what they know about the Antarctic. Members then share their ideas with their group and determine areas of shared understanding, with the goal of deciding what areas of understanding are shared by students. Those common areas of understanding are then recorded in the centre area of a Place Mat (see Oral Language Strategies in the *Grade 5 Literacy Support Guide*).
- Hand out copies of the book and have students look at the front and back covers. Ask students to predict what information they will learn from this book based on the title and pictures. Encourage students to analyze the pictures carefully to help them make detailed predictions about what information they think they will learn about in this book. Students can do this in partners or you can conduct this as a whole group activity.
- Ask students to look at the front and back cover and the table of contents. Have them discuss with a partner what type of a doctor they think the author might be, and infer his area of specialization. Encourage students to brainstorm the types of scientists that might conduct their research in the Antarctic. Point out that although the book tells us Dr. Norman is a research scientist (on the copyright page), we can infer that his area of research includes animals and their habitats based on the information on the cover and in the table to contents. Given this, what kind of message might Dr. Norman have in this book? Ask, *Will Dr. Norman have a message that supports the environment and wildlife or one that supports other interests? What do you think?*

Introduce supports and challenges

- Tell students that they will encounter specific words associated with the Antarctic climate and the animals that live in the region. Ask them what strategies they can use to figure out unfamiliar words. Encourage them to identify strategies such as rereading the sentence and finding

words they know within the larger word. As they read, ask students to record any words that they are unsure of, as well as the page number, so as to remind them of where to return.

Text Features

- Explain to students that the author has used headings to help the reader learn what types of information they will find on each page. The author has also used bold text to draw students' attention to certain words, which are then defined in the glossary at the back of the book. Direct students to look at the bottom of page 6 and find the bolded phrase: '**dry valleys.**' Have them read the words in the context of the sentence and predict what they might mean. Invite them to share their predictions. Students can then check the glossary at the back of the book to see how close they were to the definition.

- Underneath each animal and plant name, the author has included the scientific name in italicized print. Explain to students that all animals, plants, and micro-organisms have a scientific, or 'taxonomic' (belonging to a taxonomy) name, usually based on Latin or Greek, to provide scientists with an exact way of identifying them. The common names are used (e.g., blue whale, orcas) because they are easier to pronounce and help create a common understanding. However, because scientists come from all over the world and don't all speak the same language, they use the taxonomic names to ensure that they are all talking about the same animal or plant.

Visual Literacy Features and Self-monitoring

- Have students turn to page 7 of the text. Explain that the author has included visual information to help them understand why the amount of sea ice changes depending on the season. In partners, ask students to discuss how the tilt of the earth affects the amount of daylight the Antarctic receives. Instruct them to look carefully at the illustration and two maps. They should also read the information included in the text box to help them. Invite each partnership to share their thinking with the rest of the group. Lead students to the understanding that during the summer, the tilt of the earth results in Antarctica being in sunlight 24 hours a day and, as a result, the ice coverage decreases due to melting ice. In winter however, there is no sunlight so more water freezes. After this discussion, ask students, *Do diagrams like these provide assistance in understanding the text, or are they actually challenging to interpret?* If students find these diagrams more of a challenge than a support, revisit them to check students' understanding.

- Remind students that non-fiction text tends to have a variety of different text features. One of those features is text boxes. Have students turn to page 9 and point out the text boxes. Say, *You can choose to read the main body of text or either of these text boxes first. The order of reading is not as important as ensuring that you read all of the information on the page.*

Evaluating

Set a purpose for reading

- Give students three sticky notes. Instruct them to choose three animal traits or characteristics that they find particularly interesting and mark them with a sticky note. Tell students that they should be able to explain why their choices are worth noting.

Provide for early finishers

- Encourage students who finish early to go back into the book and see if they can find a fourth characteristic of Antarctic life or wildlife that they find interesting, and think about why they have developed their opinion in regards to this fact.

DURING READING

Monitor reading

- Ask students to read up to page 17 independently. Remind them to think about their purpose for reading and to use their sticky notes to flag important or interesting information. Also, encourage students to note vocabulary they are unfamiliar with and the corresponding page number.
- As they are reading independently, have each student read a portion of the text aloud to you. Assist students with unfamiliar wording as required. Encourage students to look for word parts they know, reread, and use context clues to help solve difficult words.
- To check comprehension, you might question individual students' understanding of what they read, e.g., *What did you learn about whales? What are baleen whales? How are baleen whales different from toothed whales? What new information did you learn?*

Observe

- Make observations regarding students' ability to evaluate important information and explain their thinking. You may want to note students' successful use of reading strategies and any difficulties they encounter.
- Make observations on your assessment tools. (See the *Evaluating Strategy Checklist* and the *Comprehension Strategies Anecdotal Record* in the *Grade 5 Literacy Support Guide*.)

AFTER READING

Revisit the purpose for reading

- Give students a few minutes to ensure they have placed all of their sticky notes and are able to explain their choices. Remind them that their explanation should include why, in their opinion, their chosen facts are worth noting. In partners, have students share their points of

Evaluating

interest and explain their choices. Have them compare what they chose with their partner to identify similarities and differences.

Check on outstanding challenges

- Review and discuss any challenges students experienced in completing this task and explaining their choices to their partner. What did they find easy? What did they find challenging? If some students found the diagrams or maps challenging revisit those and work to ensure that problems are clarified.
- Revisit any challenging words students encountered and discuss the strategies they used to figure them out. Have students share with the reading group which strategies they found most successful to solve unfamiliar words. You want to demonstrate how different strategies are effective in different situations.

Note successful strategy use

- As students are sharing with their partner and with the larger group, provide feedback about their ability to explain their choices. Note particularly effective explanations.
- Point out that proficient readers monitor their comprehension as they read. They know when something doesn't make sense or ideas are out of order. Then they use appropriate strategies to help them figure out the text. Acknowledge students who went back and reread or stopped to question themselves when they realized comprehension had broken down.

Second Session (pages 18–32)

Analyzing

Word Solving and Building and Language Predictability

BEFORE READING

Activate and build prior knowledge

- Direct students' attention to the Place Mat activity from the first session. Hand those place mats back to students and invite them to add information they have learned about Antarctica in the first half of the book to their section of the place mat. As a Think/Timed-Pair-Share activity (see Oral Language Strategies in the *Grade 5 Literacy Support Guide*) have students share the facts they think are the most interesting or surprising with their partner. Encourage students to explain why they found a particular fact interesting. Select a couple of students to share with the group.

Introduce supports and challenges

- On a white board or the chalkboard, write the words, 'Chile' (page 18), 'camouflage' (page 19), 'anemones' (page 23), and 'tardigrades' (page 28). Review with students some of the strategies they can use when they come to a word they don't know (e.g., finding words they know within the larger word, using context clues within the sentence or paragraph, or using a dictionary).

Visual Literacy Features

Evaluating

- Do a book walk from page 18 to the end to look at the layout features. Discuss how the layout of the book helps the reader process the information included. Draw students' attention to the scale diagrams on the right-hand side of the pages. Have students discuss the types of information they learn from each of these diagrams (relative size, exact size and weight, predators, feeding, migration information).

Set a purpose for reading

- Ask students to read to the end of the book, have them select what things they like about the book and things they don't like (at least three of each) and chart them as seen below. Their opinions should focus on the author's craft, e.g., Were enough visual literacy features given to support learning? Were these features supportive or did they provide further challenges? What, if anything, would students change?

I liked _____ because...	I disliked _____ because...
- the pictures. I liked them because they made it easier to see what the author was talking about.	- that no pronunciations were given. I disliked this because I was often unsure of how to say words in the text.

TEACHING TIP:

Write the purpose for reading on the board so it is visible to all students in the group. This will help them focus as they read and encourage independence when they finish reading.

Provide for early finishers

- Encourage students who finish early to write a few comments on what impressed them the most about the Antarctic. Of all the extremes in living and survival, what did students find most fascinating?

DURING READING

Monitor reading

- Listen to each student read a portion of the text quietly to you. Ask them to show what they are recording on their two-column chart and to identify why they made that choice. Check their ability to form an opinion and explain their thinking.

Observe

- Observe and listen to students as they read the text, assisting with word solving strategies, vocabulary, and fluency. Provide prompts encouraging students to look for word parts they know, reread for meaning, and use context clues to help solve unfamiliar words. Invite students to explain how they figured out the pronunciation and/or meaning of unfamiliar words.

- Make observations on your assessment tools. (See the Evaluating Strategy Checklist and the Comprehension Strategies Anecdotal Record in the *Grade 5 Literacy Support Guide*.)

AFTER READING

Evaluating

Revisit the purpose for reading

- Give students a few minutes to review pages 18–32 and check that they have flagged both the things they like about the book and the things they would change. In partners, have students compare the notes they made in their two-column charts. Using their notes, ask students to work together to discuss the positive features of the book, the features they didn't like, what, if anything, could be changed, and why they made their choices. As partners are working, you can make anecdotal notes about the students' selections, explanations, and ability to clearly articulate their opinion using evidence from the text.

Check on outstanding challenges

- As a group, discuss any unfamiliar vocabulary students encountered in the second half of the book. Use the strategies identified in previous discussions (context clues, using a dictionary for words such as 'skuas' on page 18 or 'limpet' on page 23, identifying words within a larger word, and so on) as well as group feedback to clarify meaning and confirm understanding.

Note successful strategy use

- Invite students to share what they do as readers to help them understand what they are reading or how they decoded unfamiliar words. Encourage them to be specific about what they do and how it helps them. Note successful examples of this. For example, *Sarah was trying to figure out what a Wilson's Storm Petrel was. She said it looked a bird in the picture, but in the first line the text said they were like little butterflies. As she read further, the author confirmed that they were small birds and she said she understood now that describing them as butterflies was just a fun description and was not meant to be taken exactly as it was written. This is a great example of reading on to figure out a puzzling question.*

FOCUSED REREADING

Three options are provided for focused rereading in the next Guided Reading lesson. Choose an activity that meets the needs of your students, or you might select a Reader Response activity from the *Grade 5 Literacy Support Guide*.

Evaluating and Synthesizing

Written

- Have students write a report outlining how they imagine continued global warming will affect the plants and animals living in Antarctica. They can include maps, diagrams, and drawings to enhance their report.

Synthesizing

- Students can select one animal from the book they are interested in learning more about. They could then do a mini-research project on their animal and include information on habitat, predators, protection, migration, diet, reproduction, and interesting facts.

Synthesizing

- Students could write a challenge to other students to stop global warming. Students can incorporate the suggestions from the book into their challenge. They can then present their challenge at a school assembly, a monthly parent meeting, or to other classes.

Analyzing

Artistic

- Students can create a coloured image of one interesting example of Antarctic wildlife in its appropriate setting. Encourage students to include details of their chosen wildlife example's habitat.

Synthesizing

Oral/dramatic

- In partners, students can write a brief script for a radio show focusing on some aspect of the Antarctic, using information from the text. They would then decide who would be the interviewer and who would be the scientist/expert. The students could then conduct an interview in front of the rest of the class. Classmates could be encouraged to 'call in' to ask for clarification or pose any questions they have.