

Two Polar Regions

		Lower 1500–1800 words RA 8.8–9.2	Middle 1900–2400 words RA 9.3–9.7	Upper 2500–3000 words RA 9.8–10.2
Fact	Procedure	Build Your Own Easel	Making a Cheesecake	So You Want to Be a Cartoonist?
	Recount (Explanation)	Ten Milestones in Space	Rail Accidents	Three Terrible Hurricanes
	Information Report (Description)	Mythical Creatures	The World of Caves	Top Towers
	Information Report (Explanation)	A Weather Counting Book	Two Polar Regions	Seven Ancient Wonders
	Interview	Food Science FAQs	Hobbies	Fireflies and Glow-worms
	Biography	Ned Kelly	Mother Teresa: Saint of the Gutters	Edmund Hillary
	Explanation	How Forensic Scientists Work	How Musical Instruments Work	How Solar Energy Works
	Procedural Recount	How I Learned to Be a Nipper	How I Trained for the Junior Triathlon	How I Learned to Snowboard
Fiction	Realistic Fiction (Out of School)	Junkyard Treasure	Outback Betty's	Harry's Dream
	Realistic Fiction (In School)	On the Case	The Real-Life School Project	Ms McMahon
	Historical Fiction	The Wooden Horse Trick	Cheung Saves the Day	The Slave
	Fantasy	The Cloud Washerwoman	Sammy Stevens Sings	Finbar and the Long Trek
	Science Fiction	A New Source of Power	The Intergalactic Race	Eighth Moon
	Humour	The Upstairs Dragon	My Rhyming Grandpa	Catty Bimbar and the New-Age Pirates
	Mystery	Mystery Under the Big Top	The Mystery of Autoplane 500	The Mystery of the Missing Food
	Folktales	The Wicked Witch of the Singing Sands	Gulnara	Momotaro, Little Peachling

We have designed these lesson plans so that you can have the plan in front of you as you teach, along with a copy of the book. Suggestions for teaching have been divided into questions and discussion that you may have with students before, during, and after they read. You may prefer to explore the meaning and the language in more detail before students read. Your decisions will depend on the gap between students' current knowledge and the content, vocabulary, and language of the book they are about to read. The more information students have up front, the easier it will be for them to read the text.



TWO POLAR REGIONS

Middle level fact

**Text type: Information Report
(Description)**

Reading age 9.0

Word count 2,336

Before Reading

Activate prior knowledge by asking students what an information report is. Tell students that an information report is an explanation. The subject of the report is introduced at the start, and the rest of the book contains information, pictures and photos, with labels or captions that describe the subject or topic.

The information in these reports is true and accurate and not just one person's opinion.

Examine one information report with students. Read the title and the blurb. Identify the subject and examine the contents page. Build understandings that the contents in the book are subheadings of the main topic.

Browse through the illustrations and discuss how they help the reader to understand the topic.

COVER

Before Reading

Read the title and examine the cover photograph. Discuss what the book may be about. *What do the photograph and the title suggest about this book? What are the names of the two polar regions? Discuss the meaning of the word polar.*

Read the blurb. What additional information does this give you? What do you expect to find inside this book? Guide the discussion to build understandings that this book will provide information about the Arctic and Antarctica.

What do you expect to be the subheadings in this book?

Which animals and people do you think will be in this book?

What is meant by the words harsh climate?

What is the purpose of this book?

CONTENTS PAGE

Open the book. Discuss the features of the contents page. *Where would I go to find information about Climate?* Students should quickly respond with the page number. Repeat for other pages. Encourage quick responses. *What do you know about information books?* Students should indicate that the reader can choose where they'd like to start.

Students should mention the terms *glossary* and *index*. Ask students to explain what each term means. Visit each of these pages to clarify that the glossary provides meanings for new or tricky words about the topic, and the index provides the page numbers to help the reader locate particular things in the book.

Revisit the contents page. Discuss the term *introduction*. *What does this mean?* Lead students to acknowledge that an introduction will provide background information about the topic that will help us to read the book.

INTRODUCTION

During Reading

What do you notice first about this page?

Guide students to discuss the images. *What do these images show? Why do they show a globe as well as a map?* Discuss the way the images support students to build knowledge of the geography or location. *Which parts are the polar regions? What countries are located at or around these regions? Do you think people live in the southern polar region? What tells you this?*

Read the introduction and find out what you can about these regions. Be ready to discuss any differences between the northern and southern polar regions.

After Reading

Does the North Pole comprise the whole northern region? What else is there? Students should identify that Greenland, most of Iceland, northern Canada, Alaska, Russia and Scandinavia, as well as hundreds of small islands, make up the northern region. *Does that mean that there would be lots of people living in the northern region?* Invite inferences.

What is the northern polar region called? What is the Arctic? Refer students to the top of page 5 to check.

What is the southern polar region called? What is Antarctica? Refer students to the last paragraph on page 5 to check. *How big is the southern polar region?*

Are there any people living in Antarctica? How do you know?

CLIMATE

During Reading

Read the title. *Examine the photos and read the captions. How warm do you think the summers would be? Invite inferences. What protects this polar bear from freezing during this snow storm?*

What do you notice about the text on page 6? Students should notice the bold text on pack ice. What does this mean? Direct students to the glossary to read the definition aloud.

As you read pages 6 and 7, jot down some interesting facts about the climate in each of the polar regions.

After Reading

What is the weather like in both polar regions?

What was the coldest temperature ever recorded? Where was it recorded?

How warm is the summer in Antarctica? How thick is the pack ice? Would it be strong enough to walk on? Drive on? Land a plane on? Invite inferences.

How cold does it get in the Arctic in winter? And in the summer? Where is it colder?

At 10 degrees Celsius, what are people able to grow in the summer?

What else happens in the summer in the Arctic?

These areas would seem to be very moist due to all the ice, but this is not the case. How much rain falls in these regions? What is the word used to describe how dry these parts are?

What is interesting about the days in summer and winter in the polar regions?

PEOPLE IN THE POLAR REGIONS

During Reading

What do the title, photos, and captions on pages 8 and 9 tell you? Discuss each of the images to build knowledge prior to reading. Discuss the term the midnight sun.

What do you notice about the text on page 9? Students should notice the bold text on explorers and expeditions. Ask students to explain the terms and then visit the glossary and read the definitions aloud.

Instruct students to read about the people in the polar regions and then to continue reading to the end of page 17 about some of the explorers who went on expeditions to these areas.

As you read, jot down interesting points to discuss at the end.

After Reading

Do people live in the northern polar region? At which times of the year? Why do some people leave during winter?

Do people live in the southern polar region? Why not? Groups of people stay for a period of time in Antarctica. Who are these people? What is the purpose of their stay?

Why do you think many explorers died on expeditions to the polar regions?

What interesting things did you discover about the explorers? Invite students to share their findings. Are expeditions to the polar regions a recent thing? How far back do they date? Prompt students to note that there was only one woman amongst the group. Which of the explorers had you heard of before? Discuss.

ANIMALS IN THE POLAR REGIONS

During Reading

Read the title and look at the photos and captions. Walk through the remaining photos in the book. Discuss each briefly. During the walk through the book, direct students' attention to the bold words and ask them to make predictions about word meanings. Quickly navigate to the glossary to read the definitions.

Read pages 18 to 30. When you read the glossary words, you may like to revisit the glossary to make sure you understand the sentences containing those words.

As you read, jot down some information about these animals that has enabled them to adapt to survive the harsh cold of these regions.

After Reading

Do the animals you have read about live in the polar regions all year round? Why might some animals stay and others migrate during the coldest periods?

What are some of the ways these animals have adapted to the cold? Discuss the animals in order as you move through the book. List the features of the animals that have enabled them to survive the cold.

Discuss why some animals may visit the polar regions during summer.

Which animals are the best equipped for these conditions?

As you move through the book, discuss the meaning of words such as krill, tundra, and lichens.

⚠️ CODE BREAKER

The glossary helps us to know the meanings of new or tricky words. Discuss the meanings of these words that did not appear in the glossary: thaw, geology, downy, krill, dense, detect, tundra, muzzles, lichens.

Find each word in the book so that it can be read in the context of other words. Do the first word together. Encourage students to infer the meaning of the word. Check the word in the dictionary. Record the word, the inferred meaning and the actual meaning.

Ask students to complete the rest of the words with a partner. Their job is to write the words, read the sentences containing the words in the text and record their inferred meanings. At the end, invite students to share their inferences and provide the (actual) dictionary meanings for them to record.

📖 MEANING MAKER

Imagine that you are visiting one of the polar regions. Chat to a partner and discuss:

Which polar region you would visit and why.

What you would take with you. Remember that you need to carry everything you take, so you need to choose carefully. You also need to remember that you need to stay warm enough to survive and that you are visiting a desert.

With your partner, make a list of things you think you would take. When you are done, reread the list and consider: can you carry it all, and is it going to sustain you to survive?

What do you hope to see and do when you arrive?

At what time of year would you go?

How long do you think you could stay?

📖 TEXT USER

The information in this book has been set out in a clear, easy to read manner. Revisit the text, showing students each page. *What elements about this book help us to find information quickly?* Guide students to notice that the subheadings clearly identify the start of new information.

How does this make it easy for us to locate the information we need?

Engage the students in some practical examples. *Close your book. As quickly as you can, locate the information about climate. Close your book. As quickly as you can, find killer whales.* Discuss students' strategies for quickly navigating through the book.

What else did this book feature to help us?
Assist students to notice the maps and table.

📖 TEXT CRITIC

Discuss this book and the way the information is presented to the reader. *Do you think, as you are reading, that someone is telling you what they think? Or do you think that you are reading just the facts?*

Explain that some information books just give the facts, and others give a person's recount of the facts. Tell students that information may be presented in either of these ways in books, magazines or on documentaries.

View a documentary. Before viewing, tell students to take note of whether the documentary is just the facts, or is being told as somebody's opinion. Discuss at the end.

USING MULTIPLE INTELLIGENCES

Small group activity

Each group needs three ice cubes, three small plastic bowls (the three bowls must be exactly the same kind), and three watches or timers.

Experiment: Time how long the ice takes to melt in 3 different environments – one in the sun, one in the shade but in a warm, bright place, and one in a cooler place (e.g., under a building with cement floors). (L)

Observe: Every minute, take note of the changes that have occurred. Note the exact time it takes for the ice to completely melt. (V, L)

Record: your information on a table. (S, L)

MULTIPLE INTELLIGENCES

The theory of multiple intelligences was developed by Howard Gardner, a professor of education at Harvard University. Howard Gardner's theory suggests that the current view of intelligence, as measured by IQ tests, is far too limited and discriminates against students who think in different ways. He proposes taking a broader perspective and has identified eight different intelligences. These are:

- verbal-linguistic intelligence – word smart
- logical-mathematical intelligence – number/reasoning smart
- visual-spatial intelligence – picture smart
- bodily-kinaesthetic intelligence – body smart
- musical-rhythmic intelligence – music smart
- interpersonal intelligence – people smart
- intrapersonal intelligence – self smart
- naturalist intelligence – nature smart

Multiple intelligences have enormous potential as a tool in furthering reading and language development. Traditionally, the teaching of language and reading has focused mainly on two intelligences: logical-mathematical and verbal-linguistic. This means that many students who possess different intelligences do not receive the necessary opportunities, encouragement, instruction, or reinforcement to succeed with reading as well as they might.

Two Polar Regions

Name _____

Introduction	
Climate	
Residents	Where they live
Explorers	Expeditions and achievements
Animals	Ways they have adapted to the cold (mark with * those that live in the polar regions all year round)



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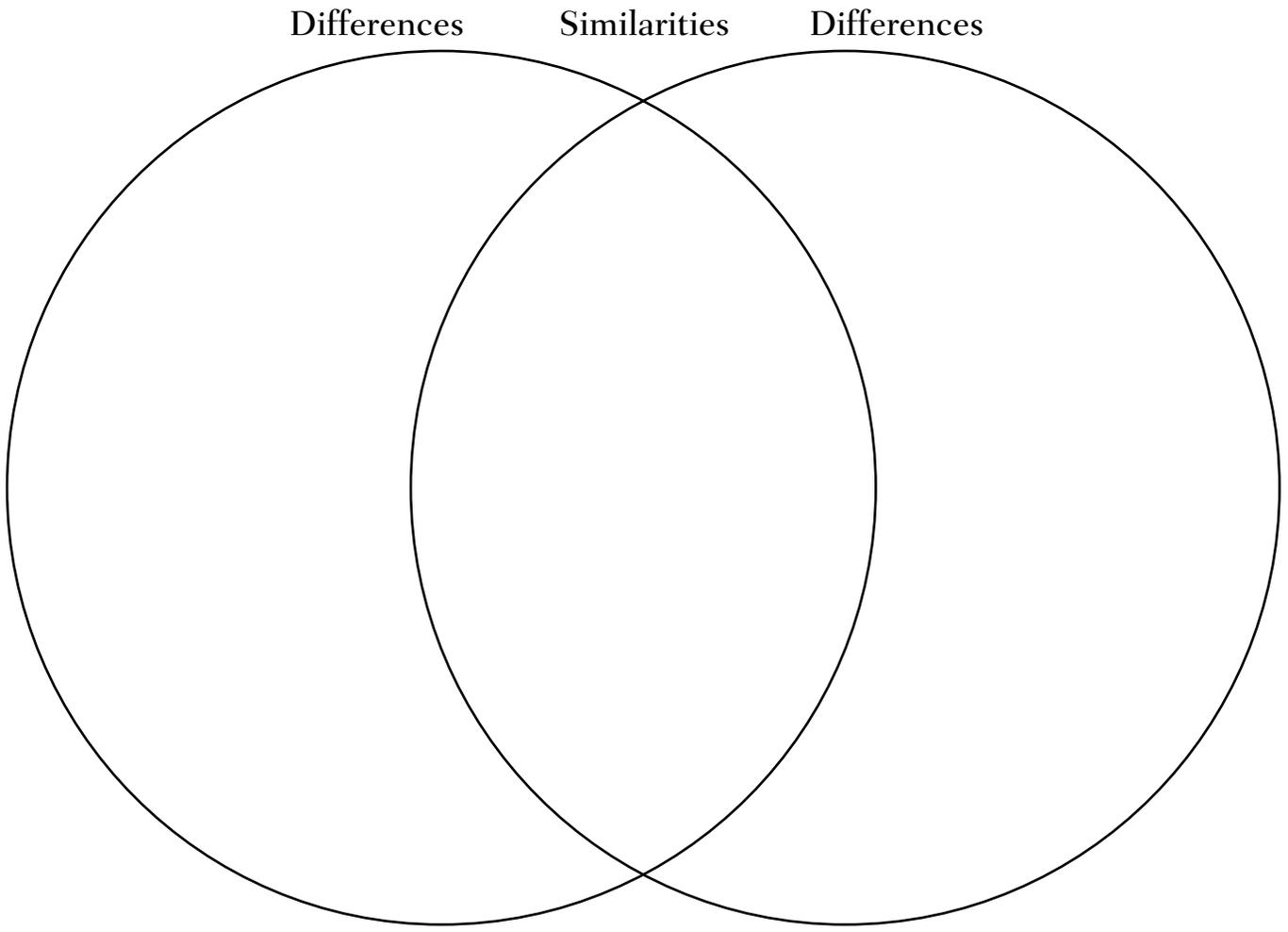


Two Polar Regions

Name _____

Multiple Intelligences (logical-mathematical)

Complete the Venn diagram to show the similarities and differences between the northern and southern polar regions.



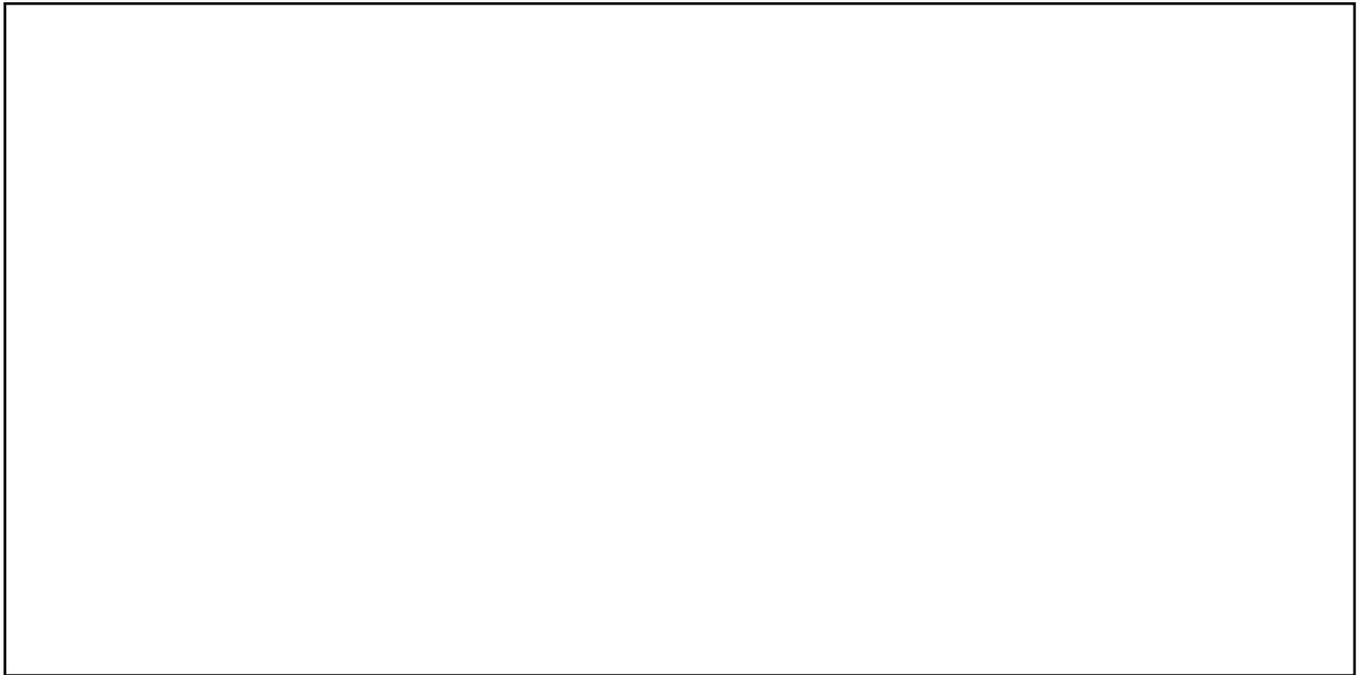
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Two Polar Regions

Name _____

If you were an animal from this book, which one would you choose to be?
Draw this animal in the box and write the reasons you would choose to be this animal and not one of the others.





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Two Polar Regions

Name _____

The glossary words are all jumbled. Unjumble them and write their meanings. Use page 31 of the book to help you.

Jumbled Word	Unjumbled Word	Meaning
bbbuler		
lafacmogue		
onxpeieetis		
slxoeperr		
tgaroimry		
acpk eic		
rpordcue		

Write the glossary words in reverse alphabetical order.



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Two Polar Regions

Name _____

Use the table on page 30 to help you answer these questions.

1. Which animals have adapted to the cold by developing a layer of blubber?

2. Which animals have a compact body to preserve warmth?

3. Which animals migrate?

4. Which animals have small ears and a small tail?

5. Which animals have waterproof feathers?

6. What is the most common characteristic for adapting to the cold?

7. Whales have developed two characteristics to help them in the cold. What are these characteristics?

8. Polar bears have developed four characteristics to help them in the cold. What are these characteristics?

9. Which of the animals has adapted the fewest characteristics for the cold environment?

10. Which of the animals has adapted the most characteristics for the cold environment?



Two Polar Regions

Name _____

The information in this book is factual. As we read, we can feel confident that we are getting accurate information.

How might our understandings of the Arctic and Antarctica be different if the author had presented this book as an interview?

Suppose that this book was presented as an interview. Write a question to ask each of the explorers.

Explorer	Question

Write some questions to ask the animals.

Animal	Question



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Two Polar Regions

Name _____

Here are the answers. You need to think of a question for each that will make the answer correct.

Answer	Question
1. Greenland	_____
2. Australia	_____
3. cold and windy	_____
4. pack ice	_____
5. desert	_____
6. explorers	_____
7. expeditions	_____
8. beluga	_____
9. blubber	_____
10. penguins	_____



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