



Teacher Edition

AlphaWorld

Summer in Antarctica

Written by James Talia



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How to use this book

The AlphaWorld teacher editions support teachers as they guide children's reading and thinking during one or more guided reading sessions. Teachers can observe children as they read and choose from the given suggestions to suit individual needs.

Before reading

Setting the context, front cover and title page:

The suggestions help teachers to set the scene and prepare children for reading the book. Prompts help to determine children's prior knowledge. Where necessary, background information is provided. Teachers are encouraged to check that children understand the vocabulary listed and to discuss the meanings and/or the structures of these words. Previous experiences with similar text types may also be discussed.

During reading

Predict, Read, Reflect:

Questions encourage children to engage with the text by making predictions. The children then read a section of the text and reflect on what they have read. The focus is on the content, language and text features of the book.

Observe and support:

Prompts help teachers to focus on the strategies children use as they read. Teachers can then select from and adapt the suggestions according to the needs of the individual child. The suggestions aim to develop a child's reading abilities. Interruptions to the child's reading should be minimal.

After reading

A selection of reading and writing activities:

The last pages of the teacher edition provide follow-up activities and include the assessment focus.

Selected text features

- Contents page
- Conclusion and index
- Colour photographs support the text

Vocabulary

Antarctica, coast, cruise, icebergs, kilometres, krill, penguins, predators, seals, thawed-out

Setting the context

Construct an 'Agree or Disagree' chart that contains statements related to the book. After reading and discussing each one complete the first column of the chart. The chart could look like the one below.

Agree or Disagree

Statement	Before reading Agree/Disagree	After reading Agree/Disagree	Details from 'Summer in Antarctica'
Antarctica is the coldest place on earth. Krill are small plants.			

Background information

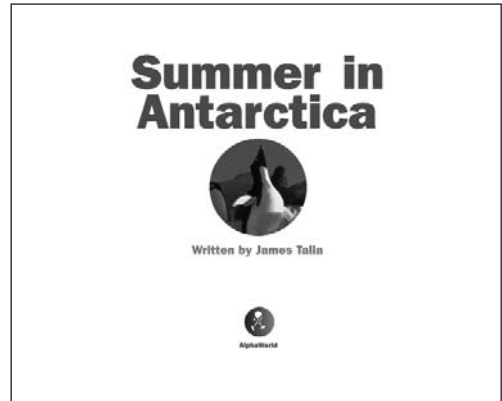
Summer in Antarctica describes and explains the brief but dramatic changes to the world's coldest and windiest place when summer arrives. As the snow and ice melts all kinds of animals arrive in Antarctica to feed on the rich food supply. Others use the summer conditions to hatch their eggs or give birth.



Front cover

Show the front cover.

*This book is called Summer in Antarctica.
What do you like to do in summer?
What can you see on the front cover?
What might an Antarctic summer be like?*



Title page

Turn to the title page.

*Discuss features found on the title page.
What can you see on the title page?
Why is this information here?*

Predict

This is the contents page. Look at the photos.

What do you think this book will be about?

Let's read through the contents page together.

Discuss any words that the children find difficult.

Turn to page 4.

Antarctica is the coldest place on earth. For most of the year it is dark and the seas around Antarctica are frozen.

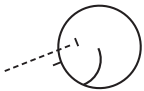
What could live in this cold, dark, windy place?

Read to the end of page 4.

Reflect

How many months of the year is Antarctica dark and gloomy? How do you know this?

Why can very few animals and plants live in Antarctica from April to September?



Observe and support

Can the child demonstrate how to use a contents page?

How do you use a contents page?

Can you show me how to find the section about seals and their pups? What would I find out about on page 10?



Contents

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A cold, dark, windy place

Antarctica is the coldest place on earth. The temperature has been recorded at minus 89°C. For much of the year, it is a dark, icy place. In the middle of winter there is no sun, and it is dark all day and all night. All around Antarctica, the seas are frozen.

Antarctica is the windiest continent. Strong winds blow across the land for much of the year and can be up to 300 kilometres per hour on the coast. Very few animals and plants can live on this cold and windy land.

But this dark and gloomy place changes for a short time.

April – September



Predict


When spring arrives the sun begins to shine and there is a little more daylight. As it gets warmer the frozen seas begin to melt.

Look at the photos on this page. What might happen when the snow and ice melt?

Turn to page 8.

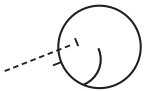
After spring, there is a short summer in Antarctica and many things change. The snow and ice keep melting. It is light all day and for most of the night.

What do you think happens during summer?

 **Read** to the end of page 8.

Reflect

What happens in Antarctica when spring arrives? Why are the coasts and seas of Antarctica busy during the short summer?



Observe and support

Ask one child to read aloud to you while the other children are reading silently.

Can the child read the text fluently?

Try to make it sound as if you were talking to someone.

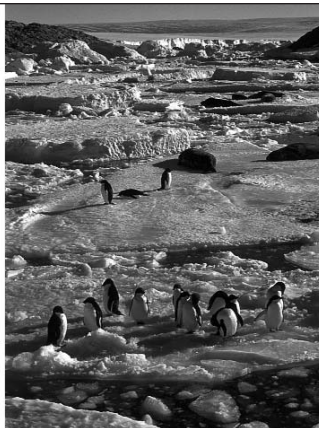
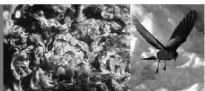
A melting place

Spring arrives. The sun begins to shine and there is a little more daylight. As the weather gets warmer, the frozen seas begin to melt.

Penguins and seals that spend the winter in the warmer seas further north begin to return to Antarctica.

The snow and ice on some parts of the land also melt. Plants begin to grow. Some seabirds arrive.

October – November



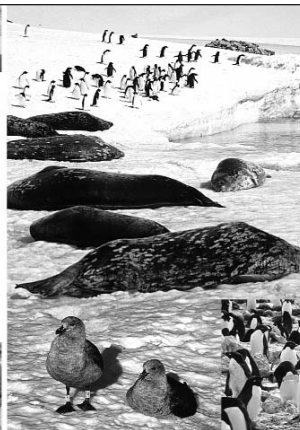
A summer place

It is summer, and things change quickly in Antarctica. The snow and ice keep melting on the coast and on the islands. It is light all day and for most of the night.

During summer there is plenty of food in the seas around Antarctica. Thousands and thousands of animals come out of the sea and onto the land for the birth of their young.

For a very short time the seas, beaches, rocks and cliffs of Antarctica become busy, noisy places.

December – January



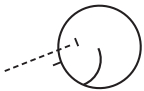
● **Predict**

*In summer there are millions of krill in the seas around Antarctica. Krill are like small shrimp.
Look at the photos on page 11. Why would krill be the most important animals in Antarctica?*

● **Read** to the end of page 10.

● **Reflect**

*What would krill look like?
Why are krill the most important animals in Antarctica?*



Observe and support

Can the child use information in the photographs and text to understand new vocabulary?

What are krill? What helped you work that out?

Eating krill

In summer there are millions of krill in the seas around Antarctica. Krill are like small shrimp. They breed in huge numbers during summer.

Krill are the most important animals in Antarctica. This is because all the larger animals eat krill, or they feed on animals that eat krill.

Large and small predators, such as whales, penguins and fish, visit Antarctica during summer to eat krill or to feed on animals that eat krill.



Predict

Millions of penguins raise their chicks during the short Antarctic summer. Some penguins walk up to 60 kilometres over the ice and snow to reach their nesting places. Why would they do this? How would they make their nests? Turn to page 14.

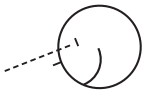
Look at the photos on this page. The chicks grow very quickly. How do you think they are fed?

Read to the end of page 14.

Reflect

How far would 60 kilometres be? How long would it take to travel 60 kilometres in a car?

Tell me what you found most interesting about penguins and their chicks?



Observe and support

Can the child interpret what the author might mean?
Why do penguin chicks need to grow quickly?

Penguins and their chicks



Millions of penguins raise their chicks during the short Antarctic summer.

Some penguins walk up to 60 kilometres over the ice to reach their thawed-out nesting places. Other penguins walk through deep snow to find a rocky place free of ice and snow where they can nest. Penguins make their nests in the same place each year.

Penguins make their nests from small stones. They pick the stones up in their beaks and put them together in the shape of a bowl. After the penguins have made their nests, they lay their eggs. Chicks hatch from the eggs.



12

13



The hungry chicks are fed by their parents. The male and female penguins take turns going into the sea to catch food for their babies.

The chicks grow very quickly. They must be ready to leave the nest by the end of summer before the sea begins to freeze again in the autumn. That is when the penguins travel north to warmer weather. They spend the rest of the year at sea.



14

15

Predict

During the Antarctic summer many birds build nests on rocks and ledges near the coast. Many different birds can be seen, including shags, terns, petrels and gulls.

Why would the birds live near the coast?

Turn to page 18.

Many types of seals come to Antarctica to raise their young pups in summer. Do you think the seal pups grow quickly?

Why?

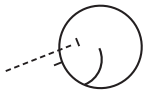
Read to the end of page 18.

Reflect

What would the nesting sites be like? What would you see?

What would you hear?

What happens to the seal pups after their mother stops feeding them?



Observe and support

Can the child understand the literal meaning of the text?

What do seal mothers feed their pups? Where did you find that out?

Birds on the coast

During the summer in Antarctica, many birds build nests on rocks and ledges near the coast. These places are safe from most predators. The nesting places become very noisy as the birds fight and squabble for the best positions and the growing chicks beg for more food from their parents.

The Antarctic seas are rich with the food the birds need for their hungry chicks. Shags, terns, petrels and gulls can be seen around the coastline.



10

Seals and their pups

In the summer many types of seals come to Antarctica to raise their pups. The pups are born around the coast in late spring and grow quickly during the summer. The mother seals feed their pups on milk for at least five weeks. After their mother stops feeding them, the pups grow new fur. Soon they are ready to hunt for their own food.



11



12

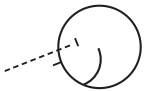
● **Predict**

Whales visit Antarctica during the summer. They eat most of their food during this season. What would they eat? How much would they eat? Why would they need to eat so much?

● **Read** to the end of page 20.

● **Reflect**

Why do whales travel long distances to Antarctica?



Observe and support

Can the child understand the inferences in the text?
Why don't whales have their young in Antarctica?

Whale visits

Whales visit Antarctica in the summer. They eat most of their food during this season. Some of them eat enormous amounts of krill — a blue whale can eat up to four tonnes of krill a day! The whales fatten themselves for the long journey north to warmer waters where their young will be born later in the year.

Other kinds of whales hunt penguins and seals. They visit Antarctica because so many of the animals they eat are there during the summer.



Predict

This is the conclusion. It sums up the information in the book. What information about Antarctica do you expect to find in the conclusion?

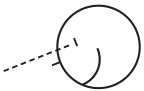
Turn to page 24.

This is the index. When would it be useful to have an index? What pages contain information about penguins?

Read to the end of page 24.

Reflect

What did you find most interesting about what we have just read? Why?



Observe and support

Can the child explain the information found in the text?

What changes does summer bring to Antarctica?

Why do the birds and animals travel north once again?

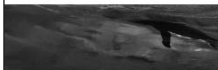
Conclusion

Summer brings big changes to Antarctica, which is the coldest place on earth. Millions of animals come out of the sea to raise their young. Some animals travel long distances to feed there.

But there isn't much time before the weather gets colder, the days get shorter and the sea starts to freeze. As the seabirds and animals leave with their young on their journey north, Antarctica again becomes a dark, quiet and frozen land.



Index



- animals 4, 8, 10, 20, 22
- birds 6, 16
- food 8, 14, 16, 18, 20
- ice 6, 8, 12
- krill 10, 20
- penguins 6, 10, 12, 14, 20
- seals 6, 18, 20
- snow 6, 8, 12
- spring 6
- whales 10, 20
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After reading

Being a meaning maker

Encourage the children to support their answers with evidence from the book as they discuss these questions:

What are some of the ways that Antarctica changes in the summer?

What is the same about all of the animals mentioned in the book?

What is different?

Why would people travel to Antarctica?

Would you like to go there? Why?

Being a code breaker

Explore the following language features:

- The prefix 'kilo': kilometres
- The digraph /th/: thawed-out, the, their, then, there, they, through
- Common noun families (adults and their young): penguin and chick, seal and pup

Being a text user

What kind of book is this?

You may like to return to the chart begun prior to reading.

Have the children consider the statements listed.

Do you agree or disagree with these statements? Which do you want to change?

What have we learned from reading this book?


Being a text critic


How has the author organised the information in the book?


What has he left out?

What would you change if you were writing a book like this?

Responding to text

 The children could construct a 3D ice cube out of cardboard. On each face of the cube they could write an interesting fact about summer in Antarctica that they learnt from the book.

 The children could complete a sequencing activity constructed from a section of the book. They could share and justify their positioning of sentences before comparing their own with the original.

 Discuss the word kilometres. *What does kilo mean? What does metres mean? How can we find out? What other words do we know like this? How can knowing how to spell kilometres help us spell other words?*

Writing links

Prepare a large copy of a picture of one of the animals in the book, for example, krill on page 9. Model writing a brief description of it. Use the following questions as a guide.

What are krill?

What do they look like?

What do they eat?

How do they move?

The children could write their own brief description of an animal from the book.

Possible assessment focus

Can the children:

- use the contents page?
- give examples of other words with the prefix 'kilo'?
- use adjectives of comparison: cold, colder, coldest?



whole text activity



sentence activity



word activity

Summer in Antarctica

Topic: Animal Kingdom/Environment/
Weather

Curriculum link: Natural Science

Text type: Report/Description

Reading level: 23

Word count: 789

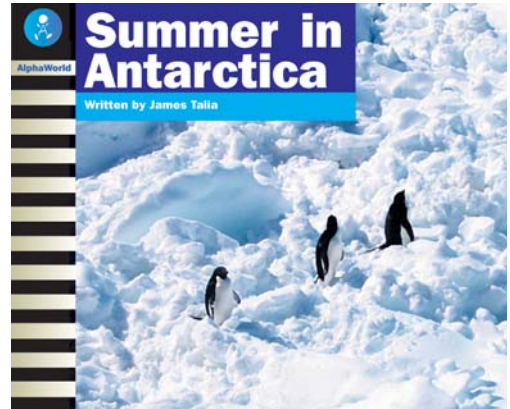
Vocabulary: Antarctica, coast, cruise,
icebergs, kilometres, krill, penguins,
predators, seals, thawed-out

Possible literacy focus:

- Using the prefix 'kilo'.
- Using the contents page.
- Using adjectives of comparison: cold, colder, coldest.

ESL possibilities:

- Discussing key words in the title prior to reading, and suggesting vocabulary that could be expected in the text.
- Paying attention to correct intonation when reading aloud.



Summary

This book describes the many changes that occur during the brief Antarctic summer. Changes on the land and in the seas allow some animals to breed while others make the most of the food that is available.

AlphaWorld



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