

POLAR BEARS CLOSEUP

MELISSA KEIL

Polar bears are one of the largest predators in the world, and they are the world's largest land predators. Polar bears are capable of swimming large distances. They are also capable of great bursts of speed. This helps them as hunters and predators. They feed on fish and seals. The cubs are tiny when they are born and stay with the mother for a substantial period before becoming independent. Polar bears are well adapted to a chilly environment, which makes them vulnerable to global warming.

ISBN: 9781742035611

RRP: \$14.99



TEACHER NOTES

Curriculum link: English/Creative Arts

Before reading:

- Brainstorm what students know about polar bears.
- What is the students' first response when they look at the cover of the book?
- How do they think polar bears would feel to touch? Would it be safe to touch a polar bear?

While reading:

Ask students to keep a table of the features that help polar bears live in their environment. In one column put the feature and in the second column write how the feature helps the polar bear.

After reading:

Ask students to reflect on the words they would use to describe polar bears and the words that have been used in the book to describe polar bears. Ask them to draw up a list of words that can be used to describe polar bears.

Curriculum link: Science and technology:

After reading the book ask:

- How are polar bears and penguins similar and different in the way they have adapted to the cold environments in which they live? Ask students to draw up a table comparing polar bears and penguins.

- Polar bears are carnivores and predators; they eat other animals. They are also prey for other animals. Ask the students to research the meaning of carnivore, predator and prey. What other animals are carnivores? Are carnivores always large animals?

Curriculum Theme: Sustainability

Why are polar bears important to the environment? Why are predators important to the environment? Why are polar bears endangered? How will polar bears be affected by climate change? What is an indicator species? Ask students to brainstorm/research reasons why polar bears are endangered (habitat destruction, eating plastic waste, oil spills and other forms of pollution) and what is being done to protect them. Have students think about why polar bears are important and what the world might be like without them. Ask students to create a poster outlining their findings.

Find out more

- Polar Bears International: <http://www.polarbearsinternational.org/about-polar-bears/essentials>
- World Wildlife Fund: <http://worldwildlife.org/species/polar-bear>

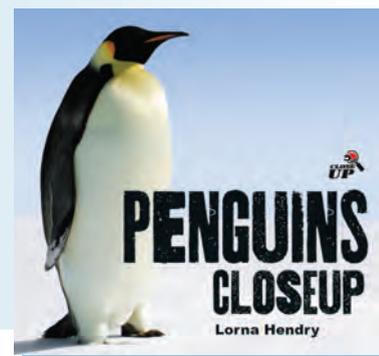
PENGUINS CLOSEUP

LORNA HENDRY

There are seventeen kinds of penguin. All are flightless but penguins can swim faster and dive deeper than any other bird. Their wings are used as flippers when they are swimming. Some live in the coldest place on Earth. Each species has adaptations to suit them to their environment. Penguins are threatened by activities of people and some species are endangered.

ISBN: 9781742035529

RRP: \$14.99



TEACHER NOTES

Curriculum link: English/Creative Arts

- Explain to students that when you use several words in a row that begin with the same sound (plucky playful penguins), you call this alliteration. How many words can they come up with that begin with a 'p' sound and describe penguins? Ask them to arrange the words into phrases that describe penguins.

Curriculum link: Science and Technology:

- Before reading, brainstorm some of the following:
 - o Where do penguins live?
 - o What do penguins eat?
 - o What colours are penguins? Why might penguins be coloured liked this?
 - o What type of animal is a penguin? (Note: a penguin is a bird.)
- After reading, ask students to list all the things they have learnt about penguins from this book.
- Ask students to choose one species of penguin using **Penguins Closeup** to help them. Ask them to research their chosen species and list five facts that they discover, eg where is it found? How big can it grow? What does it eat?

- Penguins are carnivores and predators; they eat other animals. They are also prey for other animals. Ask the students to research the meaning of carnivore, predator and prey. What other animals are carnivores?

Curriculum Theme: Sustainability

Why are penguins important to the environment? Why are predators important to the environment? Which penguins are endangered? Ask the students to brainstorm/research reasons why penguins are endangered (habitat destruction, eating plastic waste, oil spills and other forms of pollution) and what is being done to protect them. Get them to think about why penguins are important and what the world might be like without them. Ask students to create a poster outlining their findings.

Finding out more

- International Penguin Conservation Work Group <http://www.penguins.cl/>
- The Penguin Parade (Phillip Island) <http://www.penguins.org.au/>

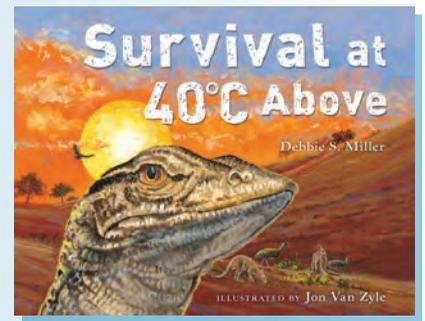
SURVIVAL AT 40°C ABOVE

DEBBIE S. MILLER | JON VAN ZYLE (ILLUSTRATOR)

The secret life of the Australian desert is captured in a text which creates an atmosphere of wonder as it also informs young readers. The colours of the sand and sky; the strange habits of the desert creatures including the sand goanna, emu, brown snake, skink, mulgara, dingo and ningau; the idiosyncrasies of the predatory and protective behaviours of these animals; and the effect of rain on this environment are all told with a sense of awe and respect.

ISBN: 9781408190296

RRP: \$14.99



TEACHER NOTES:

- **Curriculum link:** Mathematics
 - o Discuss temperatures and work out the highest and lowest recorded temperatures in the Simpson Desert and the variance between them.
 - o How large is the Simpson Desert? What percentage is it of the entire landmass of Australia?
- **Curriculum link:** Science
 - o The biological quirks of nature are often stranger than fiction! Discuss some of the 'supernatural' capacities of various forms of wildlife in the desert.
 - o 'Withered roots welcome the rain like a dry kitchen sponge. Now the desert is really wet!' (p 6). What is unique about desert ecology? Invite students to make a list of features.
 - o The Simpson Desert is said to be one of the hottest places on Earth. Discuss the challenges of surviving in this environment. Has climate change or global warming had any marked effect on this desert in Australia?
 - o In 2009-10 some of the heaviest rain in decades fell in the desert and the terrain was transformed into a sea of flowers and wildlife. Research this further and examine photos online of this spectacular transformation.
- **Curriculum Link:** Humanity and Social Sciences
 - o Aboriginal people inhabited parts of the Simpson Desert well before explorers arrived on the scene. Teachers might read 'Aboriginal Occupation of the Simpson Desert' at http://austhrutuime.com/simpson_desert_aboriginal_occupation.htm and encourage students to explore the history of the region.
- **Curriculum Link:** The Arts
 - o Study the style of painting used in this visual text. The artist worked from photos taken by the author during her time in the desert with a group of scientists. Invite students to choose one of the paintings in this book and create their own rendition of it in any medium or style and using any palette of colours you consider appropriate to the subject.
 - o Encourage students to create a short dramatised mime version of one of the scenes in the book. Design elaborate masks to indicate which animal/reptile or bird they are playing. Choose atmospheric music which might enhance the improvised performance. Read the text carefully as it does give an indication of the noises one might hear in the desert which might be added to the 'soundscape' for your performance.

GARDEN PROJECTS

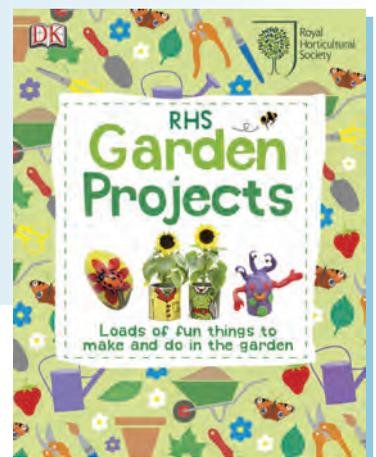
Bursting with garden projects to make, cook and create, **Garden Projects** is full of different projects for children to get excited about. From making their own garden buddy to baking a blueberry cheesecake; from lemonade lollies to Wild-West cacti, **Garden Projects** is chock-full of inspiring ideas. Each project and recipe is easy to make and has clear steps to follow.

Curriculum links: Science, Art, English, Geography

Cross-curriculum link: Sustainability

ISBN: 9781409324942

RRP: \$19.99



TEACHER NOTES

- What do plants need to grow? What sorts of plants grow best in different climates? Which plants need a lot of rainfall and which can survive in dry areas? How do plants adapt to ensure they can survive in their different climates or conditions? Make a chart of plants that grow in warm climates and those that grow best in hot climates.
- Grow your own seeds in cottonwool (bean sprouts or alfalfa work best for this). Place them in different areas around the room. Give each plant different amounts of water. Which seeds grew successfully? What did you learn about the amount of light and water plants need to survive? What happens if they have too much light and water? What happens if they do not receive enough?
- What is pollination? Why do bees need flowers? Why do flowers need bees? Are there any other animals that are useful to plants?
- What do we call peppers? What do we call courgettes? Can you think of any other foods that have different names in different parts of the world?
- What features do you usually find in a fairy garden? Using craft materials, make your own red and white spotted toadstools to put in your fairy garden.
- What are carnivorous plants? What do they eat? What types of carnivorous plants are there? What different types of mechanism do these plants use in order to catch their prey?
- Choose a patch of land at school or at home in which you can make your own garden. Consider the location of the garden. How much sunlight does it get each day? What is the soil like – chalky, clay, sandy? Is the site well drained or quite damp? What would be the best plants to establish in your garden? Will you have herbs, vegetables or flowers in your garden? Plant your own garden and decorate it using some of the activities in this book – eg labels, a scarecrow, a pond, a path. What other activities can you think of to do in the garden?
- What benefits do gardens provide for people? (Consider aspects such as health benefits, environmental benefits and food quality.) Make posters to encourage people to plant their own gardens and grow their own foods.