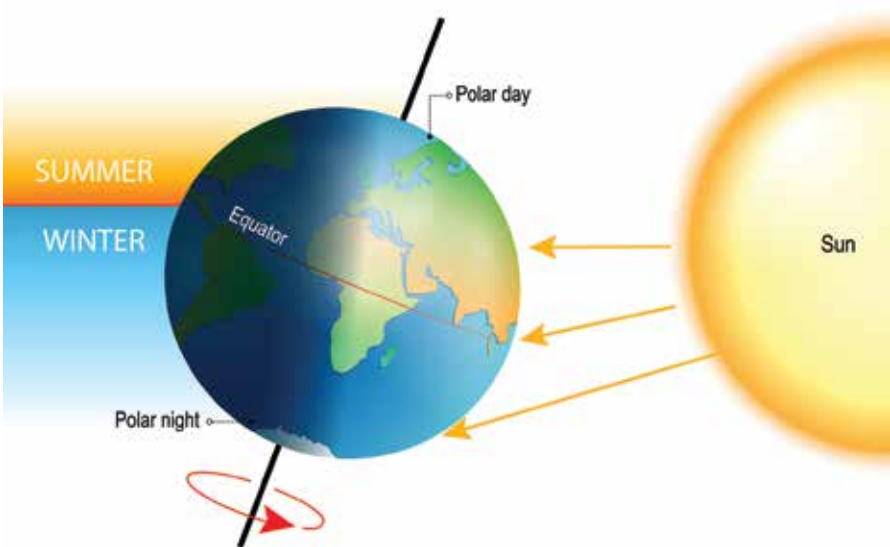




Changing Seasons

Earth and Space Sciences



Written for the Australian Curriculum: Science

Sienna Osborne | Randall Hall | Richard John

AUSTRALIAN CURRICULUM: SCIENCE

Strand:	Science Understanding, Science as a Human Endeavour
Sub-strand:	Earth and Space Sciences
Descriptor:	Daily and seasonal changes in our environment affect everyday life Science involves observing and describing changes

SCIENCE WORDS

Seasons, autumn, summer, winter, spring, Earth, Sun, daylight, weather, equator, monsoon

INFORMATION FOR PARENTS OR CAREGIVER

Helping your child learn to read is a rewarding and enjoyable experience for both you and your child. Here are some ways you can help your child with their reading.

BEFORE READING

- Introduce the book; read the title and look at the picture on the front cover. Ask what the book might be about.
- Look through the book and talk about the pictures. Do they notice any difference between the different seasons?
- Refer to the science words. Discuss each word and its meaning. These words will appear in the book.

DURING READING

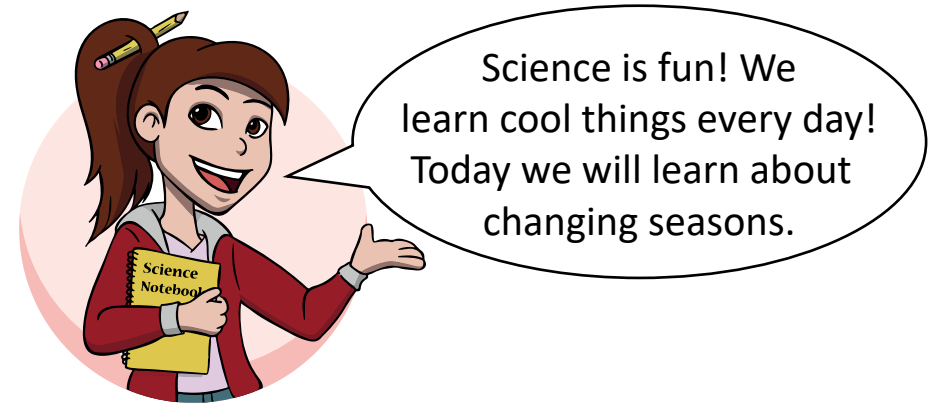
- At this level, your child should attempt to read their home reader on their own. There may be words they are unsure of. Encourage them to break these words down into their individual sounds, blending them from left to right.
- Stop your child on the pages where Suzie the Scientist appears. Discuss the science vocabulary and interesting information presented.

SCIENCE CONCEPTS IN THIS BOOK

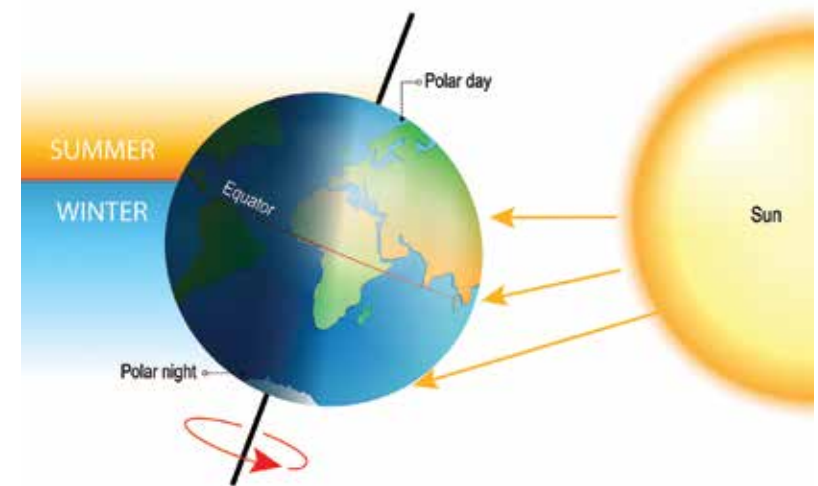
During its year-long orbit of the Sun, the Earth is tilted on its axis at an angle of 23.5 degrees (N.B. the Earth's axis is an imaginary line drawn through the Earth between the North and South Poles). This means that at certain times of the year (June–August) the southern hemisphere is tilted away from the Sun while the northern hemisphere is tilted toward the Sun—the image on the front cover represents this diagrammatically. During these months the intensity of sunlight striking the Earth is considerably greater in the north compared to the south. This makes the northern hemisphere hotter from June to August, where it is summer, compared to the southern hemisphere where it is winter.

Six months later (December–February), when the Earth is on the opposite side of the Sun, the southern hemisphere is now tilted toward the Sun and the intensity of sunlight is greatest in the south (where it is summer) and weakest in the north (where it is winter).

There is a common misconception about the seasons being dictated by how 'close' the Earth is to the Sun—in reality it is about the tilt of the Earth and the intensity of sunlight striking the Earth at different times of the year.



Changing Seasons



Written for the Australian Curriculum: Science

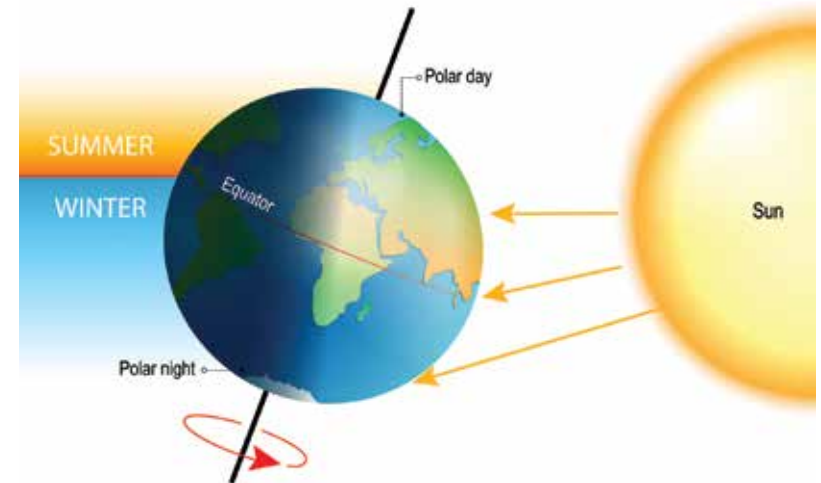
Sienna Osborne | Randall Hall | Richard John

The Earth goes around the Sun. One trip around the Sun takes the Earth one year.

As the Earth makes its trip around the Sun, the seasons change.

Most parts of Earth have four seasons.

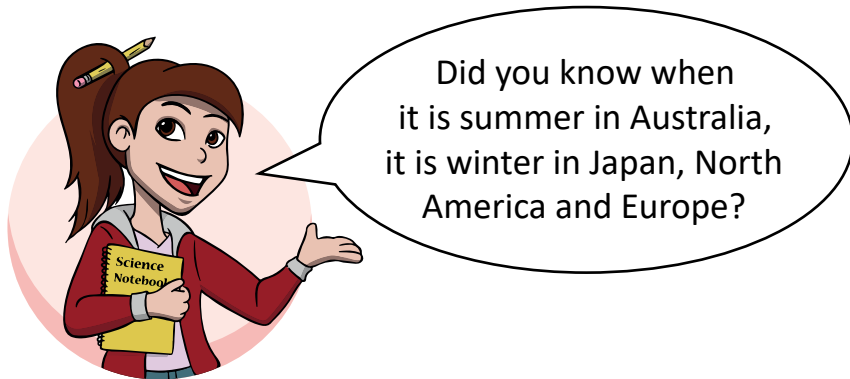
These are summer, autumn, winter and spring.



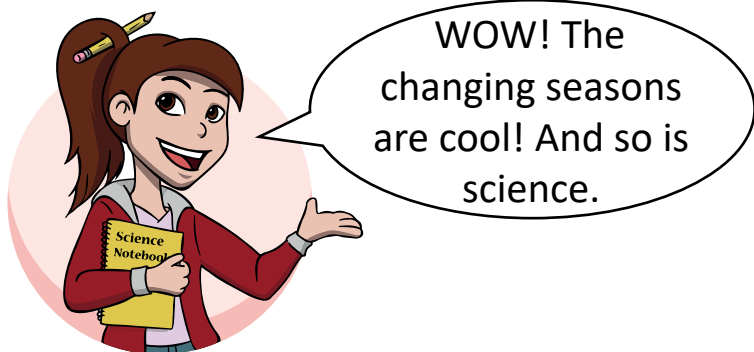
Summer

In summer the daylight hours are longer and the weather is hotter.

In Australia, the summer months are December, January and February.



What is your favourite season of the year?



AFTER READING

Ask your child what the book was about and encourage them to re-tell it in the order in which it appeared.

Discuss the following with your child to assist in understanding the content of the book:

- Which season is coldest?
- Which season comes after spring and before autumn?
- Why do you think many animals have their babies in the spring?
- What is your favourite season? Why is this so?

First published in Australia in 2017
Publicious Pty Ltd

Copyright © Sienna Osborne, Randall Hall, Richard John 2017

Reproduction and communication

Apart from any fair dealing for the purposes of private study, research, criticism or review, as permitted under the Act no part of this book may be reproduced, stored in a retrieval system, communicated or transmitted in any form or by any means without prior written permission. Inquiries should be addressed to the publisher

National Library of Australia Cataloguing-in-Publication data:
Osborne, Sienna; Hall, Randall; John, Richard
Changing Seasons
ISBN: 978-0-6481833-0-3

Printed in Australia

Acknowledgements

Series Illustrators: Gemma Duffill, Sam Dunn, Carissa Harris, James Elms
Series Graphic Artist: Sam Dunn
Series Consultants: Samantha Hutchinson, Gayle Brent
Images: Shutterstock

Community Partners

The authors gratefully acknowledge the support of the following people and organisations for their assistance in the production and distribution of this series:

Jock and Beverly McIlwain, Mermaid Waters, Queensland, Australia
Griffith University, Queensland, Australia
Rotary International, Australia, District 9640
P&Cs Queensland



Changing Seasons

Earth and Space Sciences

In this book Suzie the Scientist helps us learn about the changing seasons. We explore how the seasons change throughout the year and make observations of these changes—such as how the temperature and daylight hours change in each season. We also learn which months of the year each season starts and finishes.

Australian Curriculum: All books in the 'Suzie the Scientist' series are written for the *Australian Curriculum: Science* and align directly to what children learn in the classroom. This book addresses the learning outcome "Observable changes occur in the sky and landscape" from the Earth and Space Sciences sub-strand.



WOW!
Changing seasons are cool! And so is science.

PARENTS, READ ALONG WITH SUZIE!

Throughout this book Suzie the Scientist tells us interesting scientific facts. Use these pages to encourage further interest and discussion about **the changing seasons** with your child.

Suggested Reading Level:



PM 10-12, & Fountas & Pinnell F-G



ISBN 978-0-6481833-0-3



9 780648 183303 >

Publicious Pty Ltd | Gold Coast, Australia
www.suziethescientist.com.au