



Picture graphs

What's Your Favourite Ice Cream?

Statistics and Probability



Written for the Australian Curriculum: Mathematics

Sara MacDonald | Randall Hall | Richard John

AUSTRALIAN CURRICULUM: MATHEMATICS

Strand:	Statistics and Probability
Sub-strand:	Data representation and interpretation
Descriptor:	Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays.

MATHS WORDS

Question, type, tally marks, notebook, picture graph

INFORMATION FOR PARENTS OR CAREGIVERS

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 pictures. Ask your child if they know how to collect data and make a graph, in particular a picture graph.
- Refer to the maths words above. Discuss each word and its meaning. These words will appear in this book.

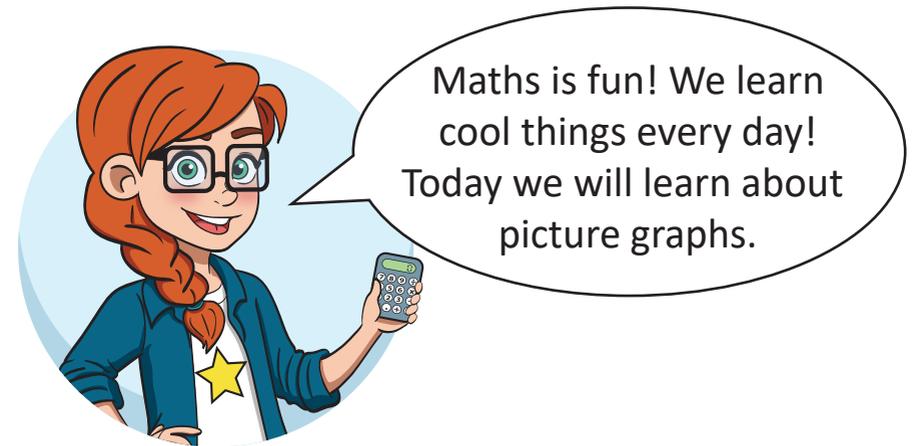
DURING READING

- At this level, your child should attempt to read their home reader on their own. They may be unsure of some words. Encourage them to break these words down into their individual sounds, blending them from left to right.
- Stop your child on the pages where Millie the Mathematician appears. Discuss the maths vocabulary and interesting mathematical information presented.

MATHS CONCEPTS IN THIS BOOK

This book addresses the *Statistics and Probability* strand of the *Australian Curriculum: Mathematics*. In this strand, students are required to represent data with objects and drawings and describe their displays. This book addresses concepts that include data collection, use of tally marks, displaying data in a picture graph format and interpreting the data.

Students explore graphing by being introduced to picture graphs. Picture graphs use a picture of an object to represent either a value of one, or a larger number of that object. One stick figure person can be used to represent one person, or a larger number of people. For example, one stick figure could represent a million people when graphing populations.



What's Your Favourite Ice Cream?



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It's Anita's birthday. Her friends are coming to her house for a party.

"What type of ice cream should I buy for your party?" asks Anita's Mum.



Anita is not sure. She needs a way to find out what type of ice cream her friends like best.

At school, she asks her friends a question.

“What type of ice cream do you like best?”



“Let’s get both types!” says Anita.



WOW! Picture graphs are cool! And so is maths.

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 them to understand the content of the book:

- What type of ice cream was liked the most by Anita’s friends? What type was liked the least?
- What did Anita decide to do after collecting data using the tally marks?
- Why are graphs a useful way of presenting information?
- Can you think of another question you could ask your friends to collect information? What would it be?

First published in Australia in 2018
Griffith University

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National Library of Australia Cataloguing-in-Publication data:

MacDonald, Sara; Hall, Randall; John, Richard

What’s Your Favourite Ice Cream?

ISBN: 978-0-6484079-5-9

Printed in Australia

Acknowledgements

Series Illustrators: Carissa Harris, James Elms, Gemma Duffill

Series Graphic Artist: Carissa Harris

Cover Design: Sam Dunn

Series Consultants: Samantha Hutchinson, Gayle Brent, John Robertson

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

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What's Your Favourite Ice Cream?

Statistics and Probability

Book 15 of 24

In this book, Millie the Mathematician helps us to represent and understand data by drawing and interpreting picture graphs. Anita takes a survey of friends at school to determine what type of ice cream they like best. She uses tally marks as a way of collecting and recording numerical data which she then displays in a table as a picture graph.

Australian Curriculum: All books in the 'Millie the Mathematician' series are written for the *Australian Curriculum: Mathematics* and align directly to what children learn in the classroom. This book addresses content from the *Statistics and Probability* strand within the *Data representation and interpretation* sub-strand of the *Australian Curriculum: Mathematics*. The specific Australian Curriculum content descriptor addressed is: "Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays."



WOW!
Picture graphs
are cool! And so is
maths.

PARENTS, READ ALONG WITH MILLIE!

Throughout this book Millie the Mathematician tells us interesting mathematical facts. Use these prompts to encourage further interest and discussion about **picture graphs** with your child.

Suggested Reading Level:



PM 12-16, Fountas and Pinnell G-I

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Queensland, Australia

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ISBN 978-0-6464079-5-9



9 780648 407959

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