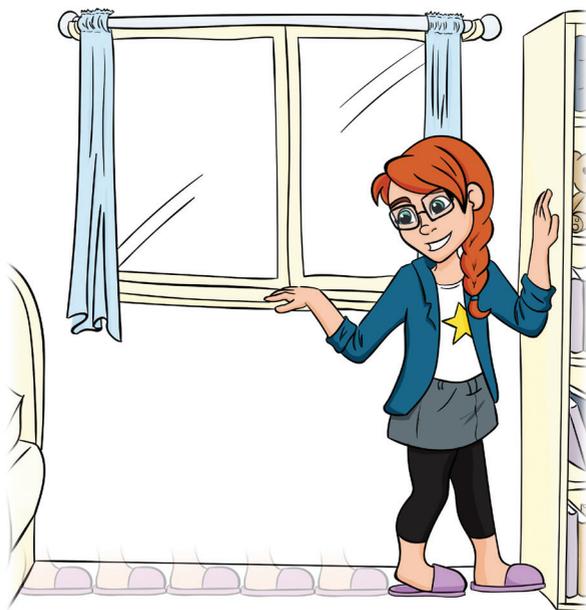




Measuring length

Millie Measures

Measurement and Geometry



Written for the Australian Curriculum: Mathematics

Sara MacDonald | Randall Hall | Richard John

AUSTRALIAN CURRICULUM: MATHEMATICS

Strand:	Measurement and Geometry
Sub-strand:	Using units of measurement
Descriptor:	Measure and compare the lengths and capacities of pairs of objects using uniform informal units.

MATHS WORDS

Long, short, measure, count, ruler, one, two, three, four, five, six, seven, eight, nine, ten

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 what the length of an object is and how to measure it.
- Refer to the maths words above. Discuss each word and its meaning. These words will appear in this book.

DURING READING

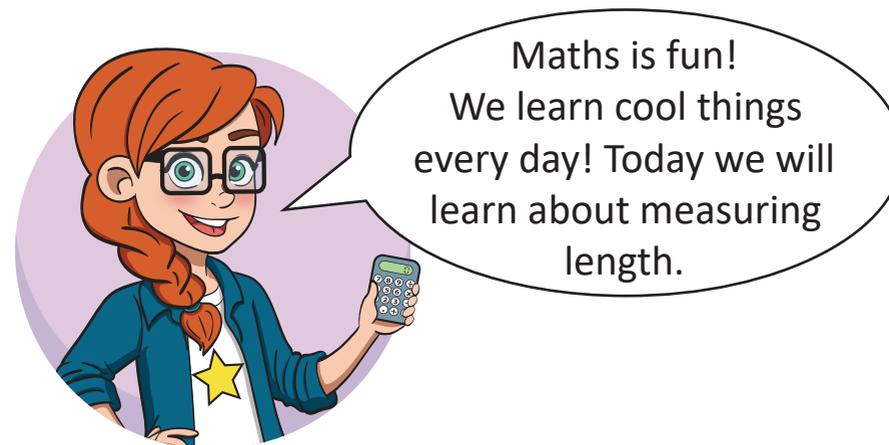
- At this level, your child should attempt to read their home reader on their own. There may be words they are unsure of. Encourage them to break these words down into their individual sounds, blending them from left to right.
- Stop your child on the pages where Millie the Mathematician appears. Discuss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

MATHS CONCEPTS IN THIS BOOK

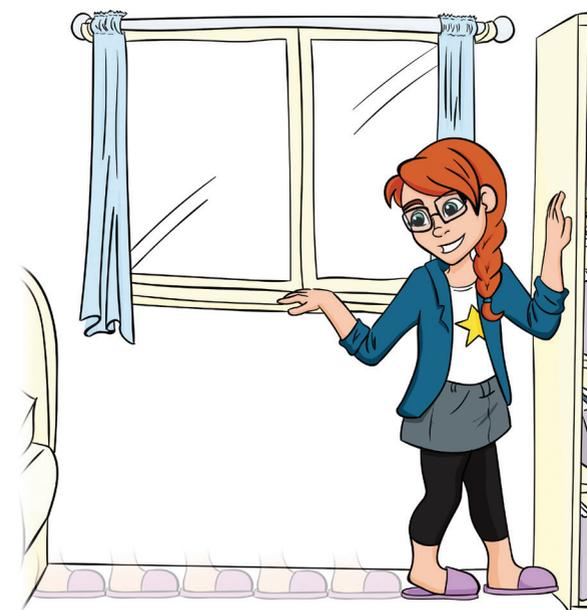
In this book, students are required to measure the length of objects using uniform **informal units** of measurement. For example, when measuring the length of objects, measurements can be made using **formal units** such as centimetres, metres and kilometres; or they can be made using **informal units** like the length of someone's foot, a hand span or a pencil.

While the use of informal units of length will not give an absolute measure of length, it does allow comparative measures of pairs of objects to be made, allowing students to determine which object is 'longer' or 'shorter'. These types of comparative measures are the subject of this book and an important component of the early part of the Measurement and Geometry strand of the *Australian Curriculum: Mathematics*.

When using informal units, it is important for students to know that the objects used as the informal unit (such as your foot) need to remain constant. For example, in this book, Millie uses her own feet to measure the comparative lengths of desks. It would be incorrect if comparisons were made using her father's feet, which presumably are of a different size to Millie's.



Millie Measures



Written for the Australian Curriculum: Mathematics

Sara MacDonald | Randall Hall | Richard John

Millie the Mathematician needs a new desk for her bedroom.

Her dad looks at the space where the desk needs to go.

“How long should your new desk be to fit in this space?” asks Dad.

“We can measure it,” says Millie.



“Oh no!” cries Dad. “I left my ruler at work.”

“What else can we use to measure the space for your new desk?” he asks.



Using a ruler or tape measure is a good way to measure the length of objects.



“What about a new chair to go with your desk?” asks Dad.

“I know how to measure that!” says Millie happily.



WOW! Measuring length is 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.

- How many desks did Millie and her dad measure?
- What did Millie use to measure the space for her new desk? What else could she have used?
- Why didn't Millie's dad use *his* feet to measure the desk at the shop?
- What types of things could you use to measure the length of a book or pencil case?

First published in Australia in 2018
Griffith University

Copyright © Sara MacDonald, Randall Hall, Richard John 2018

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:

MacDonald, Sara; Hall, Randall; John, Richard

Millie Measures

ISBN: 978-0-6480139-8-3

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

P&Cs Qld



Millie Measures

Measurement and Geometry

Book 9 of 24

In this book Millie the Mathematician helps us learn about measuring length using informal units of measurement. When Millie's dad leaves his ruler at work, Millie is forced to make comparative measures of the length of her new desk by using her own feet as informal units of measurement.

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 *Measurement and Geometry* strand within the *Using units of measurement sub-strand*. The specific Australian Curriculum content descriptor addressed is: "Measure and compare the lengths and capacities of pairs of objects using uniform informal units."



WOW!
Measuring length
is 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 **measuring length** with your child.

Suggested Reading Level:



PM 8-12, Fountas and Pinnell E-G

Rotary
District 9640



Griffith
UNIVERSITY
Queensland, Australia

P&CQld
Supporting State Schools

ISBN 978-0-6440399-9-3



9 780648 013983

Griffith University | Queensland, Australia
www.milliethemathematician.com.au