



Secret codes

# Locky Cracks the Code

Statistics and Probability



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Written for the Australian Curriculum: Mathematics

Gayle Brent | Randall Hall | Richard John

## AUSTRALIAN CURRICULUM: MATHEMATICS

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

### MATHS WORDS

Code, secret code, alphabet code, clue

### 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 what the book might be about.
- Look through the book and talk about the pictures. Ask your child if they have seen any secret codes before.
- 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.
- 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 the early years of this strand, students encounter the concept of **one-to-one correspondence** where one object or drawing represents one data value. Students are typically introduced to this concept via picture graphs, which use a picture of an object to represent a *numerical data value*. For example, a stick figure picture of a person could be used to represent one person, or a larger (defined) number of people.

In this book, we take a slightly different approach; we use pictures to address the concept of one-to-one correspondence, not with numerical data values, but with letters of the alphabet. The context employed is the creation and deciphering of secret, coded messages. Creating and cracking secret codes, using one-to-one correspondence, is an engaging way of addressing this concept in the early years of schooling. Students should practice both creating *and* deciphering secret messages via one-to-one correspondence.



# Lucky Cracks the Code



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Written for the Australian Curriculum: Mathematics

Gayle Brent | Randall Hall | Richard John

Locky gets home from school to find a note on the table.



“The note is from Dad,” says Locky’s Mum. “It is written in a secret code.”

Locky is excited. “I need to crack the code!” he yells.



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“I need a clue so I can crack the code,” says Locky.

He spots another note on the table. “What’s this?” he asks.



“It’s an Alphabet Code,” says Locky’s Mum.

Aa	Bb	Cc	Dd	Ee
				
Ff	Gg	Hh	Ii	Jj
				
Kk	Ll	Mm	Nn	Oo
				
Pp	Qq	Rr	Ss	Tt
				
Uu	Vv	Ww	Xx	Yy
				
Zz	Alphabet Code			
				

Locky has cracked the code again!



“It says ‘Maths is fun!’” he shouts.



## 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:

- In the secret code, the picture of the kite stands for which letter?
- Who do you think made up the secret code for Locky to crack?
- Why might people need to use a code to send a message?
- Can you make up a secret code and write a message to your family in code?

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Griffith University

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P&Cs Qld



# Locky Cracks the Code

Statistics and Probability

Book 10 of 24

In this book, Millie the Mathematician helps Locky de-code secret messages using an alphabet code containing images which have a one-to-one correspondence with letters of the alphabet.

**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."

## PARENTS, READ ALONG WITH MILLIE!



WOW!  
Secret codes are cool! And so is maths.

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

### Suggested Reading Level:



PM 8-12, Fountas & Pinnell E-G

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