

# Children's Literature that Incorporates a Mathematics Theme

Developed by Linda Marshall and Paul Swan to assist teachers looking to incorporate childrens literature into mathematics lessons. These books have been grouped under various themes in alphabetical order. Brief comments have been made for each publication; and links made to the Australian Curriculum: Mathematics.

## Number and Counting:

Author(s)	Reference	AC Links
Allum, M., & Watson, J.	(2005). <b>How Many Peas In A Pod?</b> Surry Hills, NSW: Little Hare Books.	ACMNA001
A counting book from 1 – 12 using flaps to be lifted to reveal the answers to each question.		
Base, G.	(2006). <b>Uno's Garden.</b> Australia: Penguin Group.	ACMNA012
A beautiful counting book; counting down, square numbers, doubling (balance).		
Base, G.	(1995). <b>The Waterhole.</b> Camberwell, Victoria: Puffin Penguin.	ACMNA012
Counting book based on a diminishing water hole; rain at the end!		
Base, G.	(1986). <b>Animalia.</b> Melbourne: Puffin Penguin.	ACMNA012
Alphabet book with plenty of counting, shape and space.		ACMNA022
Birch, D.	(1988). <b>The King's Chessboard.</b> New York: Puffin Books.	ACMNA018
Number, pre-algebra, exponential growth.		
Burningham, J.	(1980). <b>The Shopping Basket.</b> London: Red Fox Books.	ACMNA012
Steven goes shopping and buys 6 eggs, 5 bananas, etc. On the way home, animals wanting his goods meet him.		
Carle, E.	(2005). <b>10 Little Rubber Ducks.</b> London: HarperCollins Publishers Ltd.	Ordinal number
A beautifully illustrated book that looks at 10 ducks washed from a boat. Uses 1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> , etc. to tell the story of each duck.		
Carle, E.	(1995). <b>Rooster's Off To See the World.</b> London: Puffin Books.	ACMNA012
Rooster decides to travel and meets up with two cats, three frogs, etc. Later they return to their homes, counting back down from 5 fish to one Rooster.		
Cave, K.	(2002). <b>One Child One Seed: A South African Counting Book.</b> Great Britain: Frances Lincoln Ltd.	ACMNA012
A multicultural look at counting.		
Dale, P.	(1988). <b>Ten in the Bed.</b> London: Walker Books.	ACMNA012
Counts down from 10 according to the rhyme.		
Franco, B., & Salerno, S.	(2003). <b>Mathematticles!</b> NY: Margaret K. McElderry Books.	ACMNA012
Operations, symbols, equations, graphs in strange settings.		
Fromental, J., & Jolivet, J.	(2006). <b>365 Penguins.</b> [English translation] JY: Harry N. Abrams, Inc.	ACMNA018
A fantastic number book with patterns for days throughout the year.		
Hutchins, P.	(2000). <b>Ten Red Apples.</b> London: Red Fox.	ACMNA012
Counts down from 10 using repetitive language that the children can join in with,		
Jandl, E., & Junge, N.	(2003). <b>Next Please.</b> London: Red Fox.	ACMNA012
Wonderful counting backward from 5 to 0 in a to 'doctor's' waiting room.		
Mariconda, B.	(2011). <b>Ten For Me.</b> Abordale Publishing.	
An addition adventure with small numbers.		

Milborne, A. & Riglietti, S.	(2007). <b>How Big is a Million?</b> London: Usborne Publishing Ltd.	ACMNA072
A journey of discovery to find a million.		
Neuschwander, C.	(2009). <b>Sir Cumference and all the King's Tens.</b> MA: Charlesbridge.	ACMNA014
Number, counting in tens, place value		
Oliver, N.	(2003). <b>The Very Blue Thingamajig.</b> Sydney: Scholastic.	ACMNA001
A delightful and unusual counting book that would really appeal to children's imaginations.		
Parish, S.	(1998). <b>123 of Australian Wildlife.</b> Queensland: Steve Parish Publishing Pty Ltd	ACMNA001
A beautiful Australian book featuring colour photos of native Australian wildlife.		
Parker, V., & Bolam, E.	(2002). <b>Bearum Scarum.</b> London: Hodder Children's Books.	ACMNA012
A book where the hunter becomes the hunted. An amusing counting back from ten book.		
Pinczes, E.	(1993). <b>One Hundred Hungry Ants.</b> Boston: Houghton Mifflin.	ACMNA031
Number, factors, division		
Puttock, S.	(2006). <b>Don't Count Your Chickens.</b> London: Macmillan Children' Books.	ACMNA012
Doubling (counting by twos).		
Robinson, T.	(2015). <b>Fibonacci Zoo.</b> Abordale publishing	
Explores the Fibanacci number pattern.		
Root, P.	(1999). <b>One duck stuck.</b> London: Walker Books.	ACMNA001
Counts up to 10 using beautiful descriptive language.		
Ross, T.	(2002). <b>Centipede's 100 shoes.</b> London: Andersen Press Ltd.	ACMNA014
An amusing story with addition and subtraction using shoes and socks.		
Sayre, A., & Sayre, J.	(2003). <b>One is a Snail Ten is a Crab.</b> London: Walker Books.	ACMNA015
A counting book to 100, using feet. Shows different combinations for many numbers e.g., 30 is 3 crabs or 10 people and a crab.		
Schwartz, D.	(1989). <b>If You Made a Million.</b> New York: Mulberry Books	ACMNA072
Number, large numbers, percentages, interest.		
Scieszka, J., & Smith, L.	(1995). <b>Maths Curse.</b> New York: Viking.	
For anyone who has an aversion to mathematics		
Schwartz, D.	(1985). <b>How Much is a Million?</b> NY: Scholastic Inc.	ACMNA072
One million, large numbers.		
Straw, W.	(2001). <b>5 Little Ducks.</b> Melbourne: Borghesi and Adam Publishers.	ACMNA012
Counts down from 5 according to the popular song. Big, clear illustrations.		
Trinka, R., & Argent, K.	(1999). <b>One Woolly Wombat.</b> SA: Omnibus Books.	ACMNA001
Basic counting book.		
Wells, R.	(2000). <b>Can You Count to a Googol?</b> Illinois: Albert Whitman & Company.	ACMNA072
Number, counting to large numbers		
Wells, R.	(2000). <b>How do you Lift a Lion?</b> Illinois: Albert Whitman & Company.	
Science, simple machines		
Wood, A., & Wood, B.	(2004). <b>Ten Little Fish.</b> New York: Scholastic Inc.	ACMNA012
Counts colourful fish from 10 to 1 and back. Leaves each answer to the following page.		

## Operations and Computation:

Author(s)	Reference	AC Links
Anno, M., & Anno, M.	(1983). <b>Anno's Mysterious Multiplying Jar</b> . New York: Putnam & Grosser Group.	ACMNA076
A beautifully illustrated book that covers the topic of factorials ie $5 \times 4 \times 3 \times 2 \times 1$ .		
Calvert, P.	(2006). <b>Multiplying Menace: The Revenge of Rumpelstiltskin</b> . MA: Charlesbridge.	ACMNA076
Number, multiplying, division, fractions.		
Clement, R.	(1990). <b>Counting on Frank</b> . North Ryde, NSW: Bluegum.	Reasoning
A very popular book that involves estimation and encourages children to work mathematically.		
Dodds, D. A., & Mitchell, T.	(2000). <b>The Great Divide: A Mathematical Marathon</b> . London: Walker.	ACMNA056
As the name implies this book involves the division concept – especially halving.		
Hutchins, P.	(1986). <b>The Doorbell Rang</b> . London: Penguin.	ACMNA056
This story involves sharing cookies among a group of children.		
Neuschwander, C.	(2007). <b>Patterns in Peru: An Adventure in Patterning</b> . New York: Henry Holt.	
Pre-algebra		
Neuschwander, C.	(1998). <b>Amanda Bean's Amazing Dream: A Mathematical Story</b> . New York: Scholastic.	
Multiplication, repeated addition, arrays		
Pinczes, E.	(1995). <b>A Remainder of One</b> . Boston: Houghton Mifflin.	
Number, division, remainders		
Tang, G.	(2003). <b>Math Appeal: Mind Stretching Math Riddles</b> . New York: Scholastic.	ACMNA031
This book follows on from The Grapes of Math and is aimed at children moving from addition to multiplication.		
Tang, G.	(2003). <b>Math-terpieces: The Art of Problem-solving</b> . New York: Scholastic.	ACMNA030
Uses well-known works of art to motivate children to find different ways to add.		
Tang, G.	(2002). <b>The Best of Times: Math Strategies that Multiply</b> . New York: Scholastic.	ACMNA056
Uses problem rhymes to show better ways to multiply numbers from zero to ten,		
Tang, G.	(2001). <b>The Grapes of Math: Mind-stretching Math Riddles</b> . New York: Scholastic.	
Uses problem rhymes to look at simple computations in a different way, looking at some interesting strategies..		

## Measurement:

Author(s)	Reference	AC Links
Alborough, J.	(1997). <b>Watch out! Big Bro's coming</b> . London: Walker Books.	ACMMG037
A humorous tale about a mouse's big brother who appears to grow according to who describes him.		
* Allen, P.	(1994). <b>Alexander's Outing</b> . Victoria: Puffin Books.	ACMMG006
Story about a duck falling in a hole; possibilities for volume.		
Allen, P.	(1982). <b>Who Sank the Boat?</b> London: Puffin.	ACMMG037 ACMMG290
A group of animals decide to go for a row in a boat. As each animal jumps into the boat, it sits a little lower in the water. The ideas of balance as well mass are mentioned, as well as the fact that it is the smallest animal that finally sinks the boat.		
Allen, P.	(1980). <b>Mr Archimedes' Bath</b> . Sydney: William Collins.	ACMMG037 ACMMG290
Mr Archimedes notices that when he and his animal friends get in and out of the bath, the water level changes.		
Anolt, L.	(2001). <b>Knee High Nigel</b> . London: Walker Books.	ACMMG019 ACMMG037
The story of five giants, one of whom, though still a giant, is considerably smaller than the others. They argue over the building of castles, and go their separate ways with unsuccessful results.		
Billington, J., & Smee, N.	(1999). <b>Six Feet Long and Three Feet Wide</b> . London: Walker Books.	ACMMG061
This story illustrates the need for standard units.		
Briggs, Raymond.	(1970). <b>Jim and the Beanstalk</b> . London: Penguin.	ACMMG084
This book can be used to give an intuitive idea of scale.		
Burns, M,	(1997). <b>Spaghetti and Meatballs for all!</b> A mathematical story. New York: Scholastic Inc.	ACMMG109
Measurement, Area and perimeter		
Carle, E.	(1977). <b>The Bad Tempered Ladybird</b> . London: Puffin Books.	ACMMG020
A ladybird works its way through different times of the day. Shows the time on analogue clocks.		
Carle, E.	(1970). <b>The Very Hungry Caterpillar</b> . London: Penguin.	ACMMG008
A caterpillar eats its way through the week.		
Dunbar, James.	(2004). <b>Tick-Tock</b> . London: Franklin Watts.	ACMMG021 ACMMG085
This book provides an opportunity to talk about units of time (seconds, minutes, hours, days, weeks, months, years, decades, seasons), time passed and time still to come.		
Glori, D.	(2013). <b>What's The Time Mr Wolf</b> . Bloomsbury Publications	
Focuses on time throughout the day – with a mix of poplar nursery rhymes and stories.		
Hawkins, C.	(2003). <b>Mr Wolf's Week</b> . London: Egmont Books Ltd.	ACMMG008
The cycle of the days of the week shown through Mr Wolf's amusing antics		
Hindley, J., & Chamberlain, M	(1993). <b>A Piece of String is a Wonderful Thing</b> . London: Walker	ACMMG139
Traces the idea that in different eras of human history string would have been a useful tool. Times lines could be made from the information. So, how long is a piece of string? Twice as long as half its length.		
* Hughes, N.	(2004). <b>Colossal Machines</b> . Mascot, Australia: Koala Books.	ACMMG061
Comparison of large machines to dinosaurs;; length and mass.		
Hutchins, P.	(1974). <b>Clocks and More Clocks</b> . London: Penguin.	ACMMG086
As the name implies this book involves problem solving and time.		
Hutchins, P.	(1997). <b>Shrinking Mouse</b> . London: Red Fox.	ACMMG037
Deals with perspective – things look smaller from a distance.		
* Jenkins, S.	(2006). <b>Actual Size</b> . London Frances Lincoln Children's Books.	ACMMG037
Fantastic drawings of animals, actual size (large and small); get the English edition in centimetres.		

Matthews, P., & McLean, A.	(2002). <b>A Year on our Farm</b> . Norwood, SA: Omnibus Books.	ACMMG040
At last, a book illustrating months of the year and the 4 seasons in a distinctly Australian setting.		
* McBratney, S.	(1994). <b>Guess How Much I love You?</b> London: Walker Books Ltd.	ACMMG019
Distance.		ACMMG037
Myller, R.	(1962). <b>How Big is a Foot?</b> New York: Dell Yearling.	ACMMG061
This story illustrates the need for standard units.		
Pipe, J.	(2001). <b>Big and Small</b> . London: Aladdin Books	ACMMG037
Looks at big, bigger, biggest; small, smaller, smallest; and growing.		
* Princes, E.	(2001). <b>Inchworm and a Half</b> . NY: Houghton Mifflin Company.	ACMMG037
Fractions also embedded in story.		
Schwartz, D.M.	(1999). <b>If you Hopped like a Frog</b> . NY: Scholastic Press	
Units of measurement; activities in the back.		
* Slater, T.	(1996). <b>Just a Minute!</b> UAS: Scholastic Inc.	ACMMG062
What is a minute?		
Wells, R E.	(1995). <b>Is the Blue Whale the Biggest Thing There is?</b> London: Watts Books.	ACMMG037
A book of comparisons. The sizes of various things are compared.		

## Geometry:

Author(s)	Reference	AC Links
Burns, M,	(nd). <b>The Greedy Triangle</b> . New York: Scholastic Inc.	ACMMG022
Geometry: 2D Shape		ACMMG043 ACMMG063
Ellis, J.	(2004). <b>What's Your Angle, Pythagoras?</b> Watertown, MA: Charlesbridge Publishing	ACMMG089 ACMMG112
Written as a story of Pythagoras' discovery of the properties of right-angled triangles.		ACMMG222
* Goppel, C.	(2005). <b>Anna Aphid</b> . NY: North-South Books.	ACMMG037
An aphid in the nursery; perspective and scale.		
* Harvey, R.	(2007). <b>In our City: Our Scrapbook of Souvenirs</b> . Crows Nest, NSW: Allen & Unwin.	ACMMG044 ACMMG065
Mapping, space, measurement; Australian context.		
Haas, K.	(2014). <b>The Shape Family Babies</b> . Abordale Publishing.	ACMMG022 ACMMG043 ACMMG063
A book about shapes and angles		
Hennessy, B., & Joyce, P.	(2004). <b>The Once Upon a Time Map Book</b> . London: Walker Books.	ACMMG065 ACMMG090
A wonderful trip to 6 different story lands with maps, coordinates, routes, hidden objects and points of interest.		
Hutchins, Pat.	(1968). <b>Rosie's Walk</b> . London: Red Fox.	ACMMG010 ACMMG023
This book can be used to encourage the language of direction.		
Jenkins, S.	(1995). <b>Looking Down</b> . NY: Houghton Mifflin.	
Closer and closer views of the earth from space; created in paper (nice to relate to Google Earth).		

Micklethwait, L.	(2004). <b>I Spy Shapes in Art</b> . London: Harper Collins.	ACMMG009
A wonderful book that features real pieces of art. Uses paintings from Matisse to Warhol to look at geometric shapes.		ACMMG022 ACMMG042
* Mitchell, A.	(1998). <b>Twice my Size</b> . London: Bloomsbury. [Republished Igloo 2007]	ACMMG242
Comparative size of objects starting with a lady bird; roughly doubling each time,		
Neuschwander, C.	(2001). <b>Sir Cumference and the Great Knight of Angleland</b> . MA: Charlesbridge.	
Geometry, angle		
Neuschwander, C.	(1999). <b>Sir Cumference and the Dragon of Pi</b> . MA: Charlesbridge.	
Geometry, discovering Pi		
Neuschwander, C.	(2003). <b>Sir Cumference and Sword in the Cone</b> . MA: Charlesbridge.	
Geometry 3D shapes		
Neuschwander, C.	(1997). <b>Sir Cumference and the First Round Table</b> . MA: Charlesbridge.	
Geometry, 2D shape		
Neuschwander, C.	(2005). <b>Mummy Math: An adventure in geometry</b> . New York: Square Fish	
Geometry 3D shape		
Whybrow, I., & Reynolds, A.	(2002). <b>Harry and the Dinosaur Have a Very Busy Day</b> . Mascot, NSW: Koala Books	ACMMG009
This book looks at 5 different shapes, and could lead to discussion about different shapes in the classroom, in the playground, and in the environment generally		ACMMG022

### Probability and Statistics:

Author(s)	Reference	AC Links
* Anno, M., & Mori, T.	(1985). <b>Anno's Three Little Pigs</b> . London: the Bodley Head Ltd.	Probability
Permutations and combinations specifically in story,		
Einhorn, E.	(2008). <b>A Very Improbable Story</b> . MA: Charlesbridge.	ACMSP092
Probability		ACMSP093
Rodda, E.	(1986). <b>Pigs Might Fly</b> . Sydney: Harper Collins.	ACMSP092
A novel designed for middle to upper primary aged children. Contains wonderful language associated with chance.		
* Smith, D.J.	(2006). <b>If the World Were a Village</b> . NSW: Allen & Unwin.	ACMSP117
Comparative data about the world and its people.		ACMSP144

## Anthologies and Books with Many Mathematical Ideas:

Author(s)	Reference	AC Links
Dunn, O., & Gon, A.	(2003). <b>Number Rhymes to Say and Play</b> . London: Frances Lincoln Limited.	ACMNA001 ACMNA012
Heap, S.	(1999). <b>What's in a Number?</b> A collection of poems. London: Walker Books	ACMNA001 ACMNA012
Magain, Matthew	(2011). <b>Charlie Weatherburn and the Flying Machine</b> . Matthew Magain Charlie uses mathematics to achieve his dream of flying.	
Mariconda, B.	(2008). <b>Sort it Out</b> . Arbordale Publishing. Introduces the idea of Sorting and Classifying	Reasoning
Newcome, Z.	(2003). <b>Five Little Monkeys: Over 50 Action and Counting Rhymes</b> . London: Walker Books Limited	ACMNA001 ACMNA012
Newcome, Z.	(2004). <b>Ten in the Bed and Other Counting Rhymes</b> . London: Walker Books Limited	ACMNA001 ACMNA012
Vulliamy, C.	(1999). <b>If I Were Bigger than Anyone and Other Poems</b> . London: Walker Books	ACMNA001 ACMNA012
Agard, J., & Kitamura, S.	(2002). <b>Einstein: The Girl Who Hated Maths</b> . Great Britain: Hodder Wayland. Poems that inspire various mathematical concepts. Could be used as the starting pint for maths investigations.	
Ayers, K., & Tusa, T	(2003). <b>A Long Way</b> . Massachusetts: Candlewick Press. A young girl investigates different ways to take a gift to Grandma.	ACMMG023 ACMMG044
Burningham, John.	(1978). <b>Would you Rather...</b> London: Red Fox. Although this is not strictly a 'mathematics' storybook, it can be used to stimulate mathematical discussion and problem solving.	
Scieszka, j., & Smith, L.	(1995). <b>Maths Curse</b> . New York: Viking For anyone who has an aversion to mathematics	

The Mathematics Association of Victoria (<https://shop.mav.vic.edu.au/products>) maintains a wide range of Children's Literature, which you can browse by Year Level and topic.