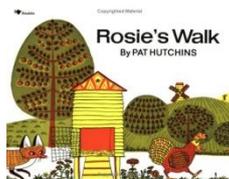


# Using Stories to Teach Mathematics



## Why Use Stories?

Children enjoy books from a very early age. The colours and pictures initially attract them, and later the storylines and characters. Stories make anything seem possible with just a little imagination. This makes stories a good way to help children to develop mathematical ideas.

Using stories in this way can help children to see the relevance of mathematics in their own lives. Stories can feature as strongly in promoting children's mathematical development as the other activities used for this purpose, such as physical activities (e.g. following directions, counting skips or jumps), music (e.g. clapping a repeated rhythm, singing mathematical songs), and art (e.g. creating patterns and shapes).

Stories can show children how numbers, measuring and shapes help us with everyday tasks. These practical examples of using maths give children a good foundation for the understanding of abstract concepts which later stages of their mathematical development will require of them. If just a couple of mathematically based questions are asked when sharing a book with children, they will soon develop their mathematical awareness, vocabulary and understanding with increasing excitement, purpose and fun.

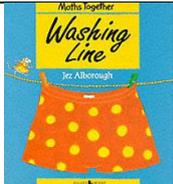
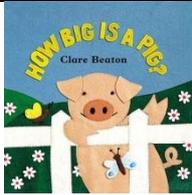
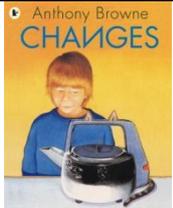
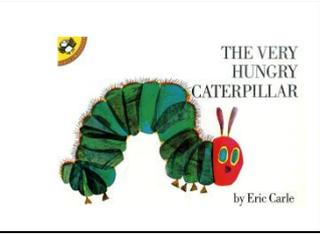
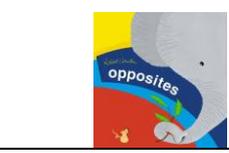
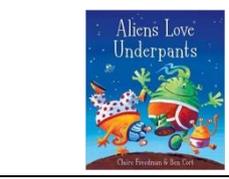
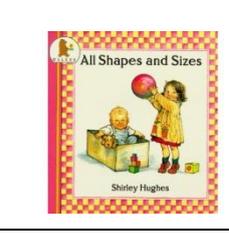
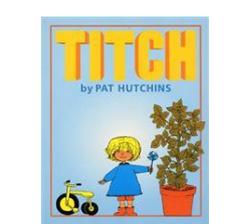
## Vocabulary

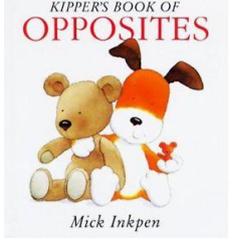
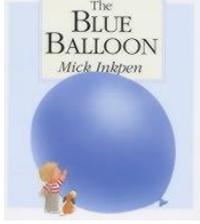
Development of vocabulary is an essential part of learning. Maths has words that are unique to the subject. Words such as minus, add, square, and symmetry are rarely used in children's everyday life. However, if these words are gently introduced through stories, your child will have a picture of what we use them to represent. This will help them to be more comfortable with these terms when they meet them again in later learning.

## How to Use Stories?

- Using illustrations in a book can further develop mathematical vocabulary and questioning.
- Use positional vocabulary e.g. 'what is behind...?' or 'who is in between...?'.
- Use comparative vocabulary when questioning e.g. 'can you see something smaller than...?' or 'is there anything taller than...?'
- If there is a number on the page, ask your child to show the correct number of fingers or count up to the number aloud.
- Use shape or spatial vocabulary e.g. 'can you see anything in the picture that is round?' or 'point to something with straight sides.'
- Storylines that develop a problem are a wonderful opportunity to encourage your child to think through what the problem is and why it needs solving.
- Make the problem more real by bringing it to life with role-play.
- Once the solution in the story has been found, re-cap on how the problem came about in the first place. The purpose for the problem solving is essential to a child's development in being able to identify problems and strategies for solving them.

## Some Examples of Stories to Use

<p>Alborough.J (2007) / <i>Washing Line</i> / Walker 140631076X, 978-1406310764</p>	
<p>Beaton.C and Blackstone.S (2002) / <i>How Big Is a Pig?</i> / Barefoot Books Ltd. 1841489581, 978-1841489582</p>	
<p>Browne.A (2008) / <i>Changes</i> / Walker 1406313394, 978-1406313390</p>	
<p>Carle.E (1994) / <i>The Very Hungry Caterpillar</i> / Puffin 0241003008, 978-0241003008</p>	
<p>Crowther.R (2005) / <i>Opposites</i> / Walker Books Ltd. 1844288552, 978-1844288557</p>	
<p>Freedman.C and Cort.B (2007) / <i>Aliens Love Underpants!</i> / Simon &amp; Schuster Children's 1416917055, 978-1416917052</p>	
<p>Hughes.S (2001) / <i>All Shapes and Sizes</i> / Walker Books Ltd. 0744569826, 978-0744569827</p>	
<p>Hutchins.P (1997) / <i>Titch</i> / Red Fox 0099262533, 978-0099262534</p>	

<p>Inkpen. M (1994) / <i>Kipper's Book of Opposites</i> / Hodder Children's Books 0340598492, 978-0340598498</p>	
<p>Inkpen.M (2006) / <i>The Blue Balloon</i> / Hodder Children's Books 0340918195, 978-0340918197</p>	
<p>Sharratt.N (2003) / <i>My Mum and Dad Make Me Laugh</i> / Walker Books Ltd. 0744594995, 978-0744594997</p>	