


<p><i>How many penguins do you think there are? Why? How? Try to answer all calculation questions throughout book. Ask this question at start of each page. Gather thoughts on their answers.</i></p>	<p>How many Penguins are there each day? – List and record What happens when we take out the 0 from the middle of a number? Use opportunity to discuss the importance of zero as a place value holder.</p>	<p><i>How do we count the penguins quicker? How did dad organise them in the book? How can we organise the penguins to help us. Discuss different ways of organising the penguins. Use character counters to help support their thinking.</i></p>	<p>How can I share out the penguins equally? What happens when there is an odd number of penguins? Can I Share out halves, quarters, thirds? What does that look like? Using the number of penguins in the book as a stimulus, share out into halves, quarters etc. Discuss left over penguins where applicable,</p>	<p>What currency do we use in United Kingdom? What other currencies do you know? What other currencies were on the book? Use opportunity to discover topic related currencies. Can explore values too if ability allows.</p>
<p><i>First and last page – What do you think will happen next? How many penguins on certain dates and do you think it will be the same for the polar bears? Encourage your child to predict what might happen. Do they see a pattern on how many penguins will come next? Discuss.</i></p>	<p><b>Maths Through Stories</b>  <b>“365 Penguins”</b>  <b>By: Jean-Luc Fromental</b></p>	<p><b>Potential of the story</b> Time Ordering numbers Estimate and predict Addition/multiplication patterns Odd/Even Sort/Share Money/currencies End of 1<sup>st</sup> Level</p>	<p><b>Key language</b> Grouping/Sharing Fractions Arrays Sorting Dates/Special occasion Patterns of Number Currency Per cent – 100 Ordinal Numbers – first, second etc. No more/less Dozen</p>	<p><i>How many penguins are there at each date? Can you make a table/calendar to display your answers? Discuss layout of calendars and dates. Find how many penguins for each day and record.</i></p>
<p><i>When dad made the boxes, What shape would the box be? How many penguins are in each box? How can we organise the penguins in the boxes?</i></p>	<p><b>Instructions</b></p> <ol style="list-style-type: none"> <li>1. Click on link below to access the story online <a href="https://www.youtube.com/watch?v=ZQIOCxxMbBM">https://www.youtube.com/watch?v=ZQIOCxxMbBM</a></li> <li>2. Each box is filled with <b>questions</b> (in red) you can ask your child</li> <li>3. The <b>Blue</b> writing are tips and hints to activities you can set up at home using the book to prompt ideas.</li> <li>4. Children can work on the activities over the course of the week. Do what they can, when they can.</li> </ol> <p>Share your creations and photographs with your teacher.</p>	<p>Can you make a cube using paper or lego bricks? Arrange them like the penguins in the book? How many blocks did you use? How did you work it out? Use any brick/blocks you have to discuss and explore cubes. Cubes have the same Length, Breath and Height.</p>	<p><i>Look at these numbers 1000, 100, 10, 0. What's the pattern? How do we know? Use Gattegno Chart (found online) to explore patterns and recognise simple number sequences and encourage them to explain the rules they have applied.</i></p>	
<p><i>Display your data from number of penguins per day on a chart. Discuss what chart would be best to display results – bar, pictogram, line, pie etc.</i></p>	<p>Share your creations and photographs with your teacher.</p>	<p><i>Do you have any daily routines that are the same as the family in the book?  Opportunity to write their own daily routing with a character of their own interrupting their day.</i></p>	<p><b>Based on an idea from Lynda Keith Education and developed by Numeracy Sac Team, East Ayrshire Council</b></p> 	

## ***Maths Through Stories***

### ***“365 Penguins”***

***By: Jean-Luc Fromental***

Resources
<ul style="list-style-type: none"><li>• Estimation station animal counters and station for exploring</li><li>• Place Value Grids</li><li>• Counting in 2's, 5's, 10's etc. sorting station</li><li>• Sorting and grouping trays/ Array opportunity using counters</li><li>• Pound and dollar currency examples to show value</li><li>• Variety of different sized boxes</li><li>• Daily timetable and monthly calendar for children to record penguins each day</li><li>• Base 10 unit cubes</li><li>• Gattegno and place value arrow cards</li><li>• Chart Paper</li></ul>