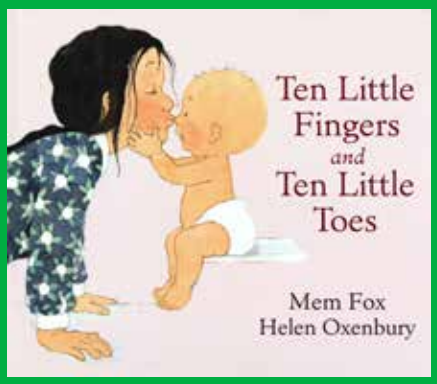
THE MATHEMATICAL
ASSOCIATION OF VICTORIA

INVESTIGATIONS

Toby Russo, Bell Primary School and James Russo, Monash University

TEN LITTLE FINGERS AND TEN LITTLE TOES

Read *Ten Little Fingers and Ten Little Toes*, by Mem Fox and Helen Oxenbury and tackle the investigations.



PART-WHOLE CONCEPT

How many babies are in the book altogether? How many boys? How many girls? Is your answer the same as all the other students in your class? Why do you think this is? There are 10 possible combinations of boys and girls. Can you identify all the combinations? You might draw some pictures, or create a table, to help you. *(Years F - 3)*

COUNTING 2's AND 4's

How many babies are in the book altogether? How many little hands are in the book altogether? How many little feet? How many little hands and feet? How did you count them? Can you count them a different way? Which way did you find easiest? Why? *(Years F - 3)*

ROUNDING AND ESTIMATING

255 new babies are born around the world every minute! Can you use rounding to estimate how many are born in an hour? What about each day? In Australia a baby is born on average every 103 seconds. Can you use rounding to estimate how many babies are born here each day? *(Years 4 - 6)*

COUNTING 10's AND 20's

How many little fingers are counted in the book altogether? How many little toes? How many fingers and toes? How did you count them? Can you count them a different way? Which way did you find easiest? Why? *(Years 1 - 4)*

ESTIMATION AND MULTIPLICITATIVE THINKING

Can you estimate how many fingers and toes are in your classroom? What about in your entire school? If the thumb didn't count as a finger, how would your estimates change? *(Years 1 - 6)*

CONDITIONAL PROBABILITY

Imagine that are were 9 different babies born at the same time to 9 different mothers. The babies are all taken to the hospital nursery after birth, but without name tags! Isla and Jasmyn, two of the mothers, come to the nursery to collect their babies. What is the probability they are both given the right babies? *(Years 5-7)*

ELAPSED TIME

There was one little baby who was born far away, so far away that he had to travel over rivers, mountains and deserts for days and nights to meet his new baby friends. If he left home on Wednesday and didn't arrive until the following Sunday, how long was his trip? The baby who was born far away arrived on Sunday 22 March. He spent three days with his baby friends before heading back home. What date did he arrive home? *(Years 2 - 4)*

PROBLEM SOLVING

The poor little baby who suffered from sneezes and chills needed a good dose of medicine to feel better. Each day for one week she had 4 mls of medicine three times a day, and happily, by the end of the week she was in perfect health. How many doses of medicine did she have over the week? How many mls of medicine was this? If each medicine bottle had a capacity of 50mls, how many bottles of medicine would her parents need to purchase? *(Years 3 - 5)*

SHARE YOUR EXPERIENCE

How did students in your class approach the above investigation? Share your class's experience with the *Prime Number* editorial team (james.russo@monash.edu), for the opportunity to have it published in *Prime Number* as a resource to share with other teachers and students. If possible, try and include photographs of work samples, as well as of students engaging in the task.