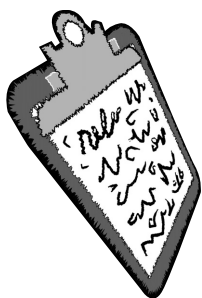


HOW TO USE THIS BOOK



TEACHERS' FILE

Read this section to find out how to make the most of this book. It contains ideas for classroom organisation as well as background notes, a handy list of materials, technology tips, assessment ideas and suggestions for parental involvement.

QUICK STARTS

Provides problem posing and investigation ideas that introduce specific problem-solving approaches, such as:

- comprehending the problem,
- dealing with new mathematical vocabulary,
- identifying a suitable strategy for getting started.

Can be used at any time as mental starters or quick challenges with little or no preparation.

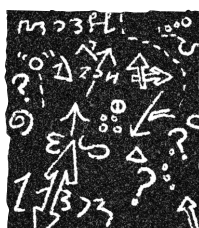
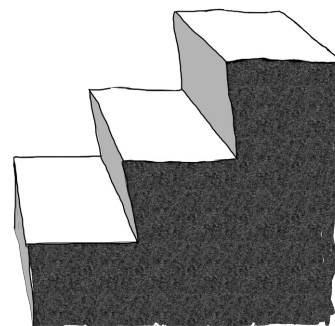


TAKE YOUR OWN TIME

These PCMs (photocopiable masters) can be incorporated into your current maths unit or can be used independently to scaffold or challenge mathematical thinking. Problem-solving Strategies (PCM 27) can make a classroom poster.

STEP BY STEP

Task cards that challenge pupils to work together as a community of maths learners to solve problems that cannot be solved alone. Clear step-by-step instructions given to scaffold pupils through the process.

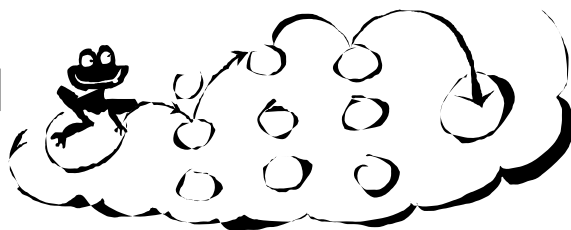


PLEASE EXPLAIN

Teaching notes for the PCMs and a detailed chart listing the maths strands covered in all of the activities in the book. Solutions are provided for some of the trickier investigations.

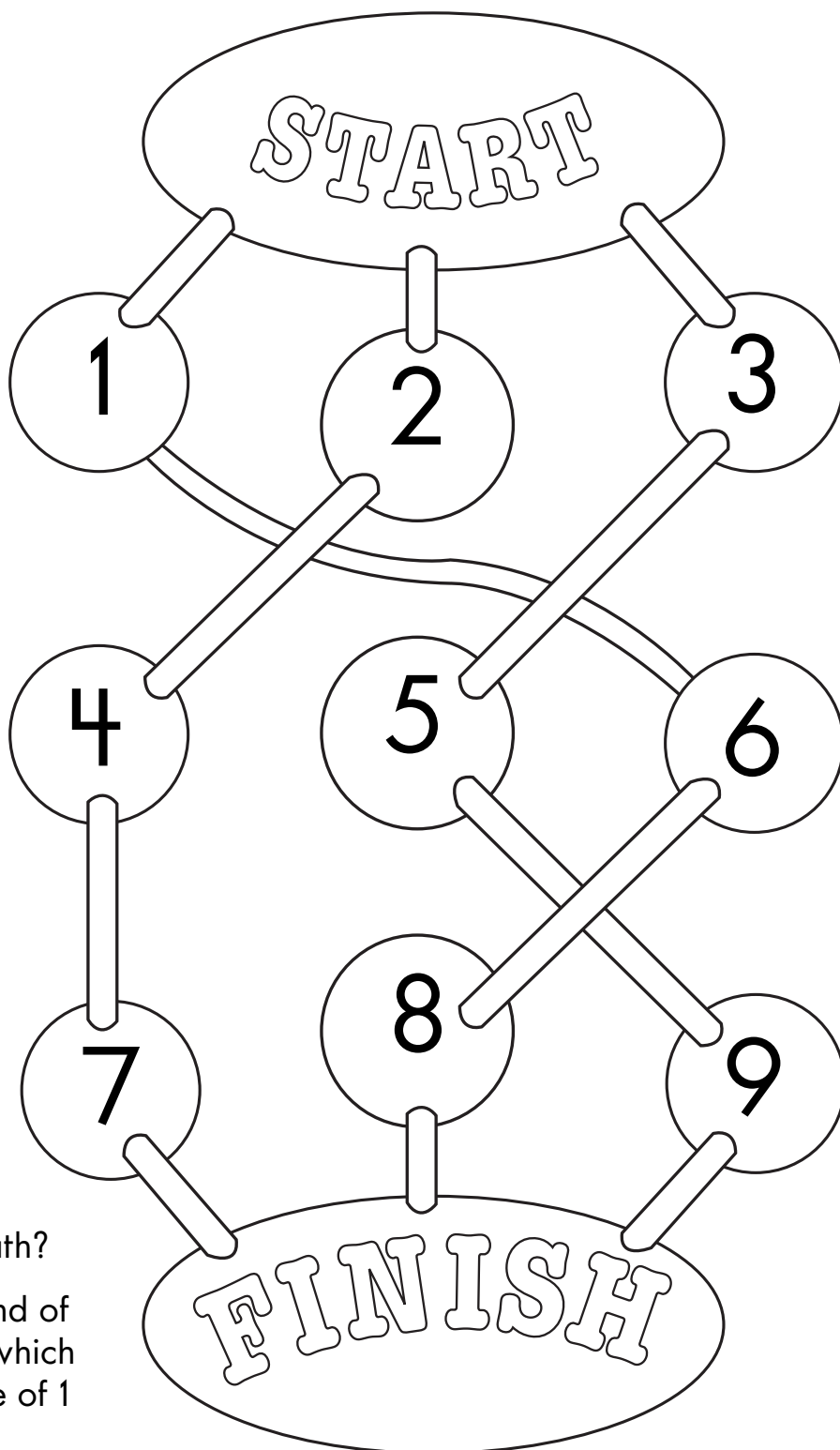
From Start to Finish

The picture shows three paths from Start to Finish.



Also:

- Every number is on one path only.
- Each path contains a number from each row.
- The totals along the three paths are 13, 15 and 17, which have a difference of 2.



Can you find another path where the totals have a difference of 1?

Can you find a path where the totals are the same for each path?

What different ways can you find of making paths that have totals which are the same, have a difference of 1 or have a difference of 2?

Key Concept: *Patterns and algebra—addition*

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Sale Time



The week before a big sale, Shonkey Syd adds 15% to all of his prices.

On the week of the sale, he advertises:

‘Clearance Sale — All stock must go — A massive 15% off all marked prices.’

These are the original prices of some of the items in Shonkey Syd’s Sale.

What are the sale prices of these items?



If you bought any of these items at 15% off the marked price, would you actually save any money?

Explain and prove your answer.

Make up a sale problem of your own.

Key Concept: *Money—operations with coins.*

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