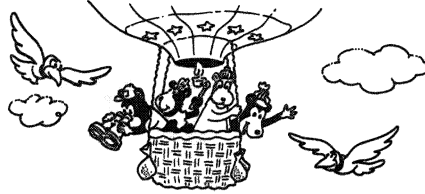


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Notes to the Teacher



This is the first in a series of books designed to help students become confident problem-solvers:

Get your Hands on Problem-Solving, Early Years

Get your Hands on Problem-Solving, Primary Years

The activities in this series introduce students to non-routine logic and maths story problems, plus a four-step plan and seven strategies for solving them. One of the strategies—Act Out with Objects—is often used in combination with the other strategies: Look for a Pattern, Make a Picture, Use Logical Thinking, Guess and Check, Make a Table and Make an Organised List.

These strategies are tools that students can use for solving a variety of problems. The activities in this book help children develop a sense of which strategies will be most useful for solving given problems. Learning to use the strategies helps children build confidence in their ability to solve problems.

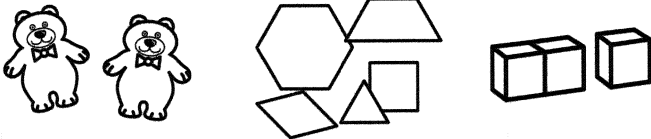
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This book presents logic and maths story problems at the simplest level. The stories often show humorous animal characters in situations that are familiar to children.

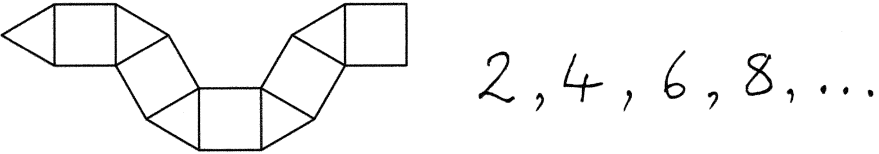
There are six sections of story problems that can be used to introduce the problem-solving process and strategies. Each section includes six story problem activity sheets, plus teaching plans for the first two story problems. The teaching plans give sample teacher-and-student dialogues that model the problem-solving process and the use of the strategy being introduced. Some also suggest that children act out the problem with objects.

Problem-Solving Strategies

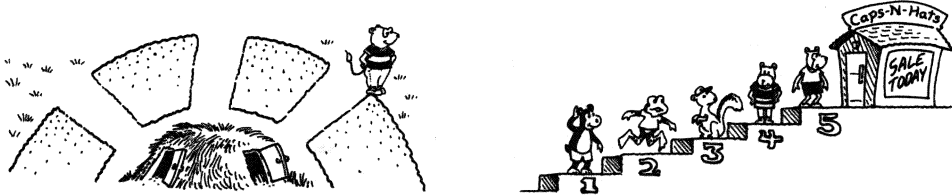
Act Out with Objects Children will move bears, cubes and Pattern Blocks around to act out many of the story problems in this book. Being able to act out the story with these objects helps children visualise what is going on in the problem, understand the underlying maths concepts and work out the solution.



Look for a Pattern A pattern is a regular, systematic repetition. Identifying the pattern helps the problem solver predict what will “come next”. In story problems 1 to 6, children will identify and continue visual patterns and number patterns.



Make (or Use) a Picture Making pictures or diagrams, such as number lines and maps, can be very useful for solving some problems. In story problems 7 to 12, children will be using pictures of steps (a type of number line) and other map-like drawings to solve the problems.



Use Logical Thinking Logical reasoning is really used in all problem solving. Logical thinking is especially needed, however, for the types of problems that include or imply conditional statements such as “If . . . then” or “If . . . then . . . else”. Story problems 13 to 18 give some clues and the children will use “If . . . then” kind of thinking to fill in missing information and solve the problems.

13 **Bears at Big Water Ride**
Three bears are lined up in boats at Big Water Ride. The red bear is the first bear in line. The blue bear is behind the yellow bear. What colour is the bear in each boat?