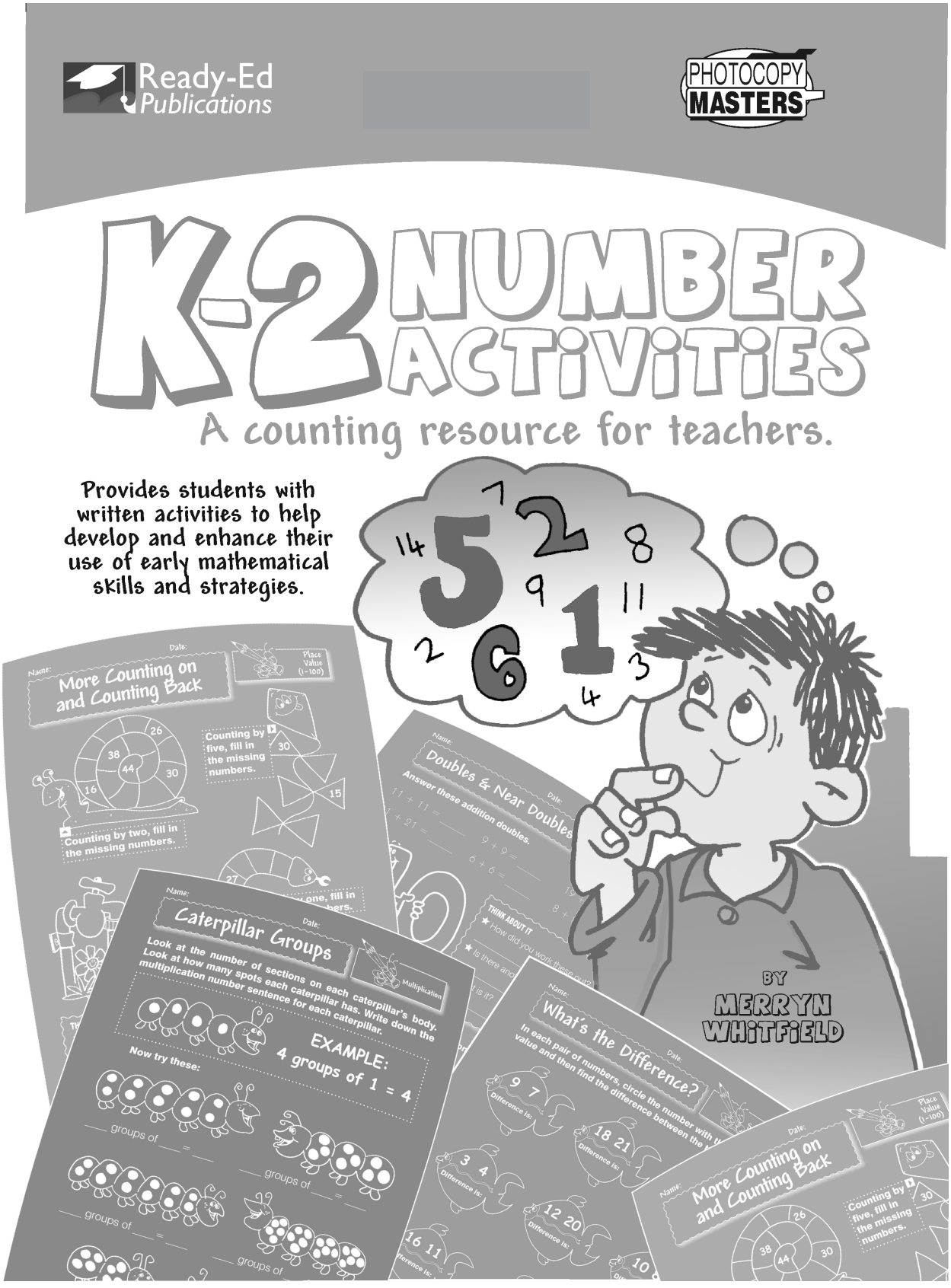
Ebook Code:
REAU0066



Contents

Introduction

The "K-2 Number Activities" resource book provides a series of activities and activity pages which enable students to access, use and understand increasingly more difficult strategies and processes when solving mathematical problems. It is designed to support and enhance the use of concrete materials within the classroom.

This book provides K-2 students with written activities to help develop, consolidate and enhance their use of early mathematical skills and strategies, including: forward and backward number sequencing, identifying numerals and matching them to groups of objects, finding differences, solving problems, comparing numbers, using doubles and familiar number combinations, and grouping numbers to make patterns.

"K-2 Number Activities" contains 38 activity pages suitable for a range of student abilities, covering the broad subsections of mathematical learning in number of whole numbers, addition, subtraction, multiplication and place value. Some of these areas have graded activities to suit differing levels of student understandings and experiences, i.e. 0-10, 0-100,

0-1000, making this a valuable resource for composite classes or those classes with diverse mathematical profiles.

Many of the pages also contain "Think About It" boxes which pose questions of students, aiming to involve them, individually or in groups, verbally or in written form, to examine, respond to and evaluate the processes they and their peers used to solve a number of mathematical problems. This analysis is designed to promote the use of varied strategies by students, encouraging them to participate in cooperative learning. Many of these questions are open ended in nature and are useful discussion points for future lessons and activities.

Mathematics is not a system of right or wrong. It is a process of developing understandings and being able to apply these understandings to new situations and relationships.

Involving students in critically analysing their thinking processes, even at the most early stages of mathematical study, is a critical component in engaging and challenging all students and ensuring personal success and self motivation.

The activities in this book are designed to complement the mathematical strategies and number concepts outlined in programs such as Count Me In Too.

- **www.curriculumsupport.nsw.edu.au/maths/countmein/**

The Count Me In Too program is an innovative numeracy project which is an initiative of the New South Wales Department of Education and Training.

Teaching Notes

Here are some ideas to help you get the most out of the written activities in "K-2 Number Activities". All activities are flexible in terms of their grouping strategy. They can be completed in teacher guided groups, student led groups, or independently, according to teacher discretion.

Whole Number

Preliminary Activities:

Involve students in meaningful counting activities: Counting the number of boys and girls in the class; counting how many children ordered their lunch; counting how many books were borrowed from the library - the possibilities are limitless.

As short lesson break activities ask students to identify which number comes before or after a given number. Encourage instant recognition of dot patterns as on a dice. Play games such as Buzz, or Snakes and Ladders, and sing number songs such as 10 Little Indians or 10 Green Bottles.

Activity Pages:

What Number Am I? (Pages 9, 10, 11)

This is a series of three graded activity sheets. As an introduction, first go through the Who am I? questioning structure orally with students, to familiarise them with the written format. The first activity (numbers 0-10) contains a number line to assist students in eliminating numbers as they go through the clues. For example, the clue "I am a single digit number" will mean that 10 is crossed off.

Unequal Numbers (Page 30)

Make sure that students are familiar with the use and operation of an equal arm balance. This activity could be linked with a series of measurement based lessons. Talk about what would make numbers heavy (being larger in value) or light (being lower in value). Have students act this out. Write a number on the board, then call out a second number. The children have to squat on the floor if the second number is larger (heavier) than the first, or stand on tip toes if the second number is lower (lighter) in value than the first.

Addition and Subtraction

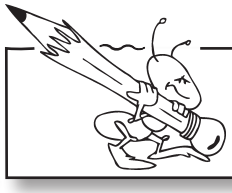
Preliminary Activities:

Focus students' attention on how we use addition and subtraction in everyday life: How many lollies were eaten and how many are left? How many children are in the class? Add the number of boys and girls and take away those students who are sick or on holidays.

Some quick and easy addition and subtraction games can be completed as oral lesson breaks. Flashcards can be useful and are readily available in most schools to reinforce simple number patterns such as add or subtract one. Use calculators to show what happens when repeatedly adding one or subtracting one from a given number. As students' skills develop, start looking at counting by two or five. Make models of eyes, hands or feet to help students visualise this concept of multiple counting.

Name: Date:

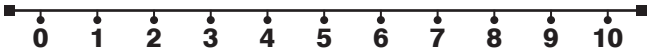
What Number Am I?



Whole Numbers (0-10)

Read the clues below. Use the numberline to help you by crossing off incorrect choices as you read through the clues.

1. a) I am a single digit number.
b) I am more than 7.
c) I am an even number.



I am the number _____

2. a) I am less than 6.
b) I am more than 2.
c) Double me makes 10.

I am the number _____

Do Your Own

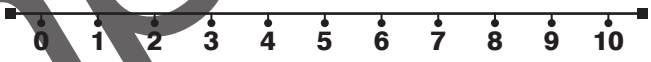
a) I am _____

b) I am _____

c) I am _____

I am the number

3. a) I am an odd number.
b) I am a lonely number.
c) I am called a single.

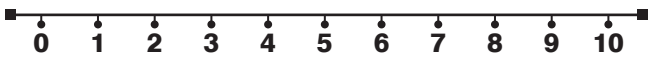


I am the number _____

4. a) I am more than 5.
b) Add 2 to me to make 12.
c) I am a 2 digit number.

I am the number _____

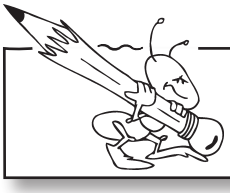
5. a) I am an odd number.
b) I am less than 6.
c) Triangles and triplets are named after me.



I am the number _____

Name: Date:

Matching Numbers and Objects



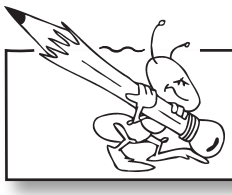
Whole Numbers

Cut out the numbered boxes. Paste the number next to the picture showing that many objects or items.

Two	2
Five	5
Nine	9
One	1
Six	6
Three	3
Seven	7
Four	4
Eight	8

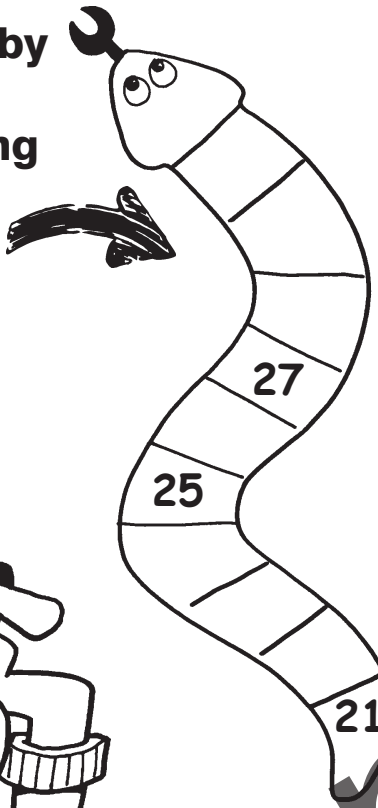
Name: Date:

More Counting on and Counting Back

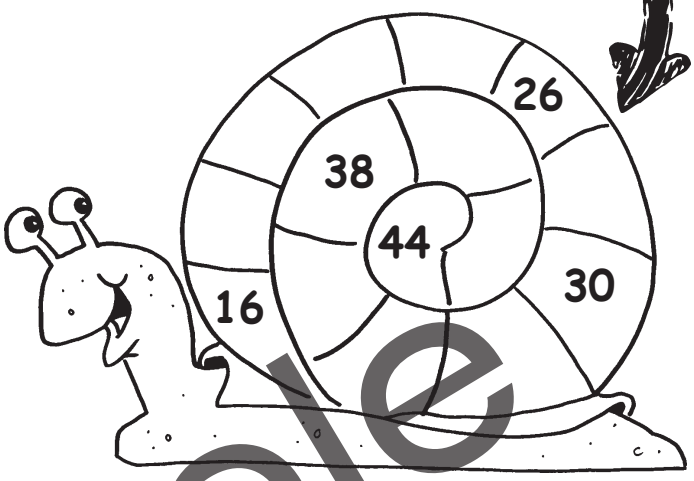


Place Value (1–100)

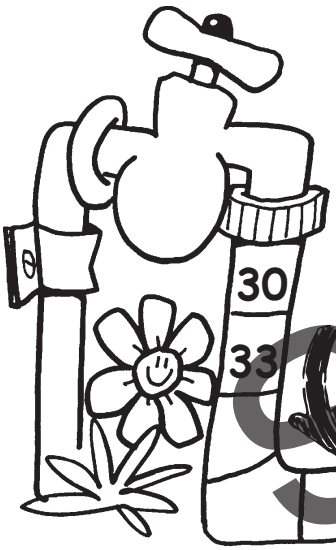
Counting by one, fill in the missing numbers.



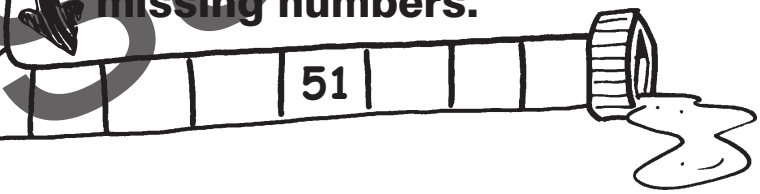
Counting by two, fill in the missing numbers.

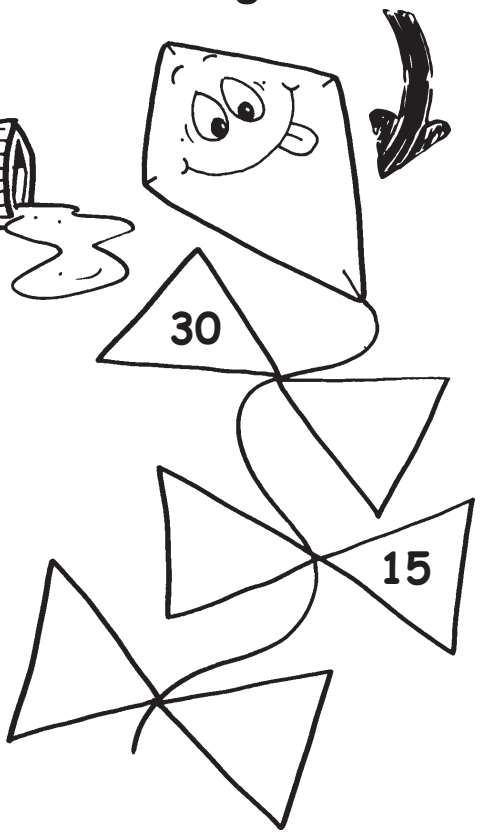


Counting by five, fill in the missing numbers.



Counting by three, fill in the missing numbers.





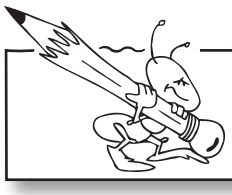
THINK ABOUT IT

- ★ Can you count by ten, starting with a number that does not end in zero?
- ★ What would happen if you counted by ten, starting at 13? Use a hundreds chart to help you.
- ★ On the back, make a snake to show what would happen if you counted by ten, starting at 17.

Ready-Ed Publications

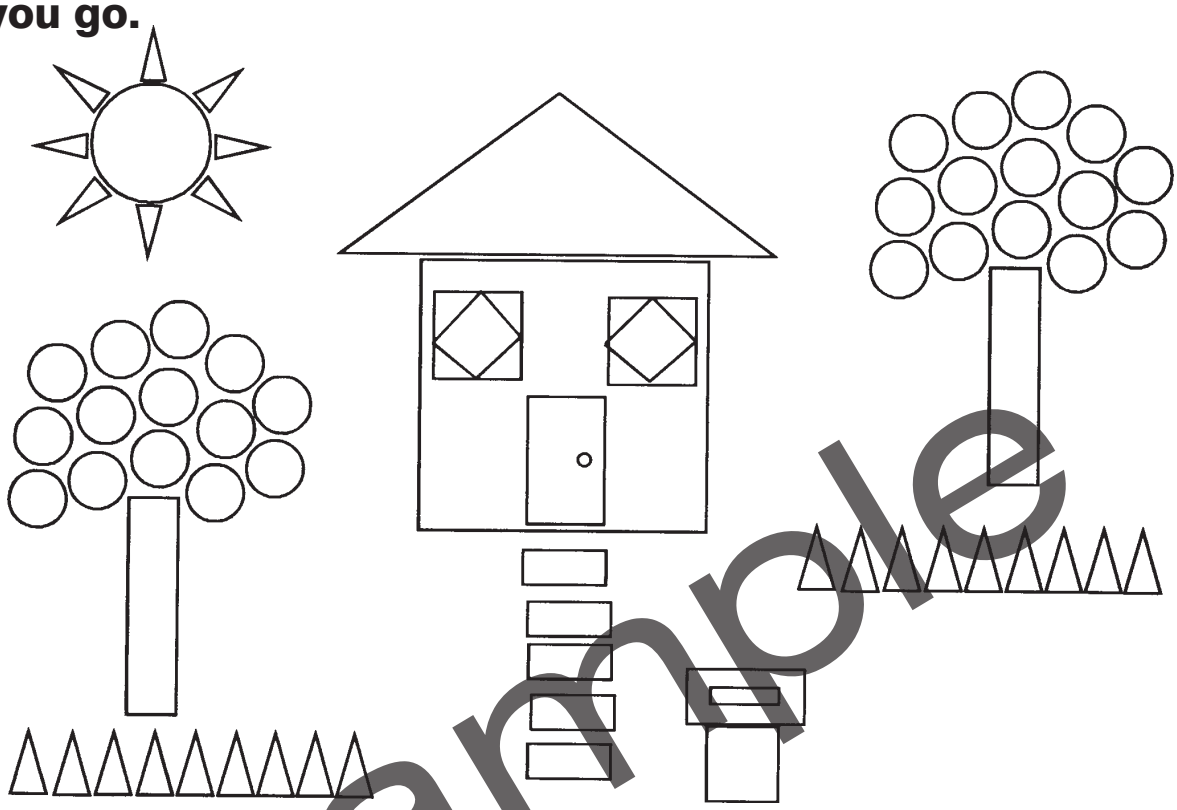
Name: Date:

Organising Data



Whole Numbers

Using the tally marks, record the number of different shapes found in the picture below. It might help to colour the shapes as you go.



Shape	Tally	Total
△		
○		
▭		
◇		
□		

THINK ABOUT IT

- ★ Did everyone use the same type of tally marks? If not, how were they different?
- ★ Why do we use tally marks?
- ★ How could we show this information? E.g. graph, picture. Draw this on the back.

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