

max maths primary

A SINGAPORE APPROACH

Student Book
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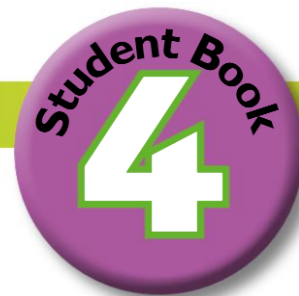
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A SINGAPORE APPROACH



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Preface

max maths Primary – A Singapore Approach is a mathematics course specially designed to meet the needs of learners following the **Cambridge Primary** curriculum framework in Stages 1 to 6.

The **Max Maths Primary** student books guide learners through key mathematical concepts, addressing the learning objectives in the **Cambridge Primary** curriculum framework. Each topic begins with an engaging introduction followed by scaffolded activities that ensure learners have grasped the necessary concepts, skills and knowledge. A variety of exercises, games and cooperative learning activities are included in each chapter to reinforce problem-solving skills and provide the opportunity for learners to develop their content knowledge.

Student book features



Chapter openers

Each chapter is introduced with clearly defined learning objectives and provides a real-world context for teachers to facilitate discussion with the class.

The Max Maths Team



Samir



Jade



Toby



Padma



Han



Tya

Engaging photographs and illustrations

Colourful illustrations and photographs help to engage learners and encourage an enthusiastic approach to learning mathematics.

Using a grid
Let's Learn Together

Let's Try It
Write down the squares that the following places are in.
(a) The house
(b) The school
(c) The police station
(d) The bridge across the river

Work Together
Work in small groups to make maps. Use a plan or a map that your teacher gives you. Draw a 10×10 grid on the map. Ask your teacher to help you to measure so you can draw the grid. Write down a series of questions asking people to find places on the map. Take it to another group and swap maps. Answer each other's questions.

Look at the numbers on the tiles. What number comes next?

(a) 2804 2806 2808 2810 2812 ?
The numbers are increasing by 2 in each step. To find the next number, we add 2 to the last number:
 $2812 + 2 = 2814$.
So, the next number is 2814.

(b) 4 3 2 1 0 ?
The numbers are decreasing by 1 in each step. To find the next number, we subtract 1 from the last number:
 $0 - 1 = -1$.
So, the next number is -1.

(c) 3500 4000 4500 5000 5500 ?
The numbers are increasing by 500 in each step. To find the next number, we add 500 to the last number:
 $5500 + 500 = 6000$.
So, the next number is 6000.

(d) 8466 8366 8266 8166 8066 ?
The numbers are decreasing by 100 in each step. To find the next number, we subtract 100 from the last number:
 $8066 - 100 = 7966$.
So, the next number is 7966.

Let's Try It

Fill in the missing numbers.

(a) Count in 2s from 1433 to 1447.
1433 1435 1447

(b) Count in 10s from 30 to -30.
-30 20 30

(c) Count in 100s from 6000 to 5400.
6000 5400

Find the next number in the number pattern.

(a) 6443 6445 6447 6449 6451

(b) 9365 9360 9355 9350 9345

(c) 20 15 10 5 0

(d) 8401 7401 6401 5401 4401

Scaffolded learning

Each mathematics topic provides scaffolding for learners ensuring they have a solid grasp of each topic before practising and applying concepts learnt.

Work Together
Form small groups in your classroom. Your teacher will give each group a set of 15 cards. Each card has a 3-digit number on it. Find 5 sets of 3 cards such that the difference between the numbers on 2 cards in each set equals the number on the remaining card. As quickly as you can, find all 5 sets of 3 cards. When your group has finished, put up your hand. The first group to finish with the correct sets is the winner.

866 203 663

Cooperative learning

Games, activities and challenging problem-solving questions encourage cooperative learning and make learning mathematics fun and exciting.

Let's Try It
Draw a line to connect the solid to its net.

(a) (b) (c) (d) (e)

Word problems
Let's Learn Together

A box contains 12 tomatoes. If they are divided into 4 paper bags equally, how many tomatoes will each bag contain?

Let's make a model.

We need to divide 12 by the total number of bags.

$$\begin{array}{r} 3 \\ 4 \overline{) 12} \\ \underline{-8} \\ 4 \\ \underline{-4} \\ 0 \end{array}$$

$12 \div 4 = 3$.
So, each bag will contain 3 tomatoes.

Cambridge Primary curriculum framework

In the spirit of the Cambridge Primary curriculum framework, practical activities that encourage conceptual understanding and problem-solving are included.

Workbook links

Workbook links provide guidance to teachers and learners by directing them to the corresponding activities in the workbook.



Numbers up to 10 000





You will learn to ...

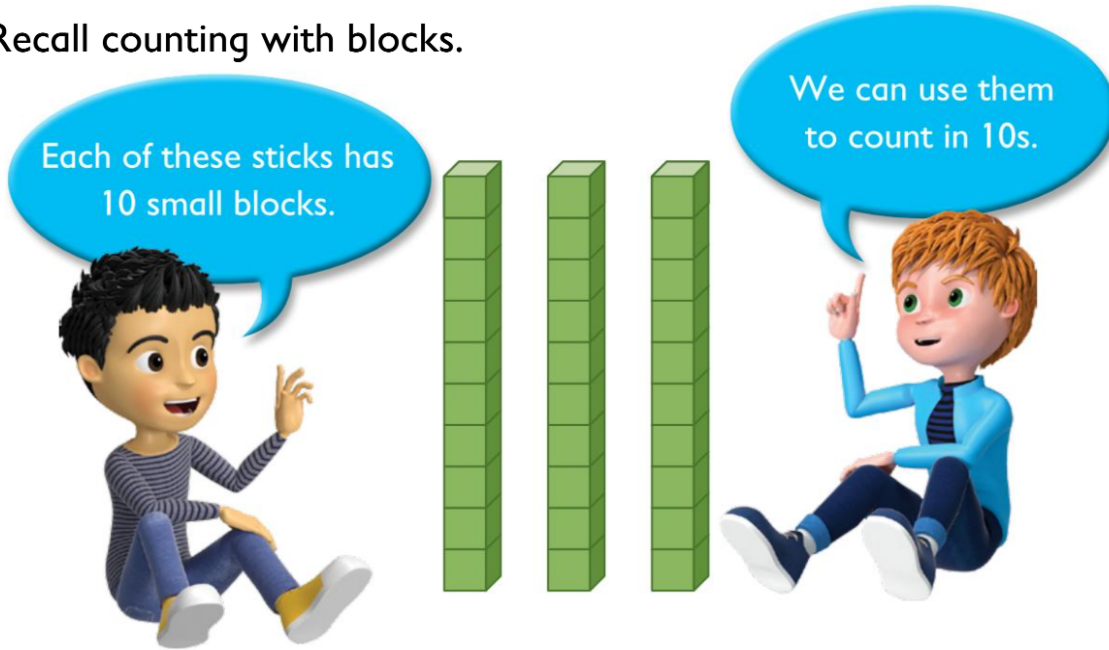
- read, write and interpret numbers up to 10 000
- recognise place value of digits in numbers up to 10 000
- compare and order numbers
- complete simple number patterns
- recognise odd and even numbers
- use negative numbers
- round 3- and 4-digit numbers to the nearest 10 and 100.



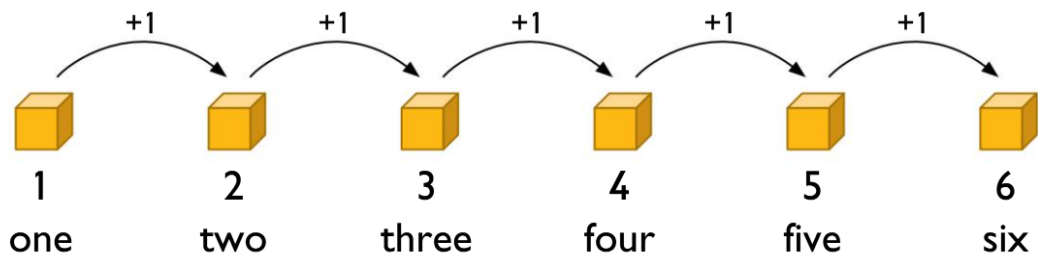
Counting to 10 000

Let's Learn Together

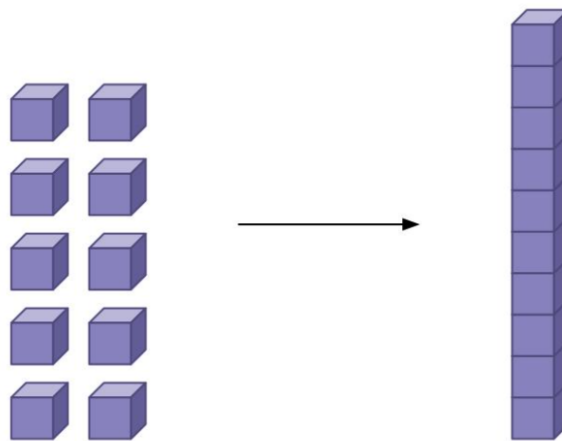
- 1 Recall counting with blocks.



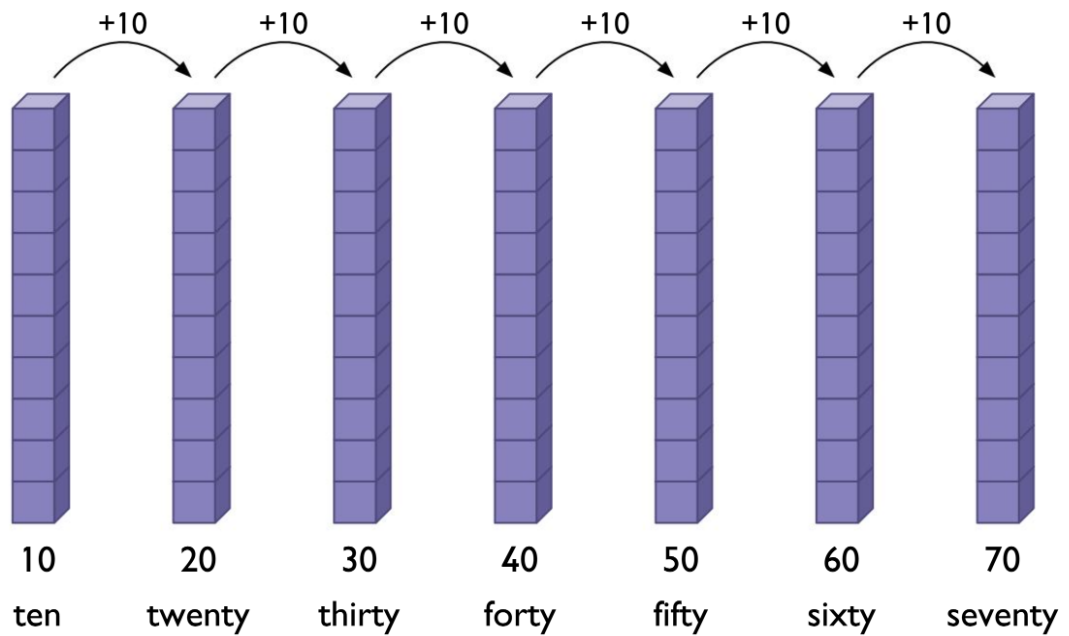
- (a) Each small block represents one. We can use these blocks to count in ones.



(b) 10 small blocks can be made into a stick. It represents a ten.



Let's count in tens.

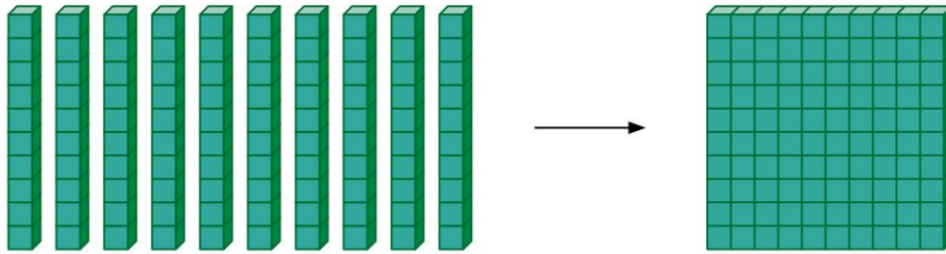


Keep counting in 10s to 100.

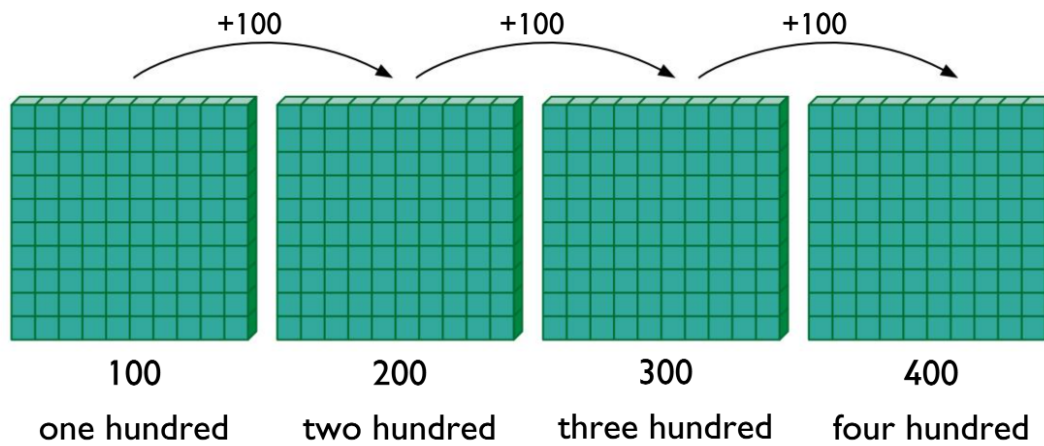




- (c) 10 sticks can make up a board of 100 small blocks.
It represents a hundred.



Let's count in hundreds.



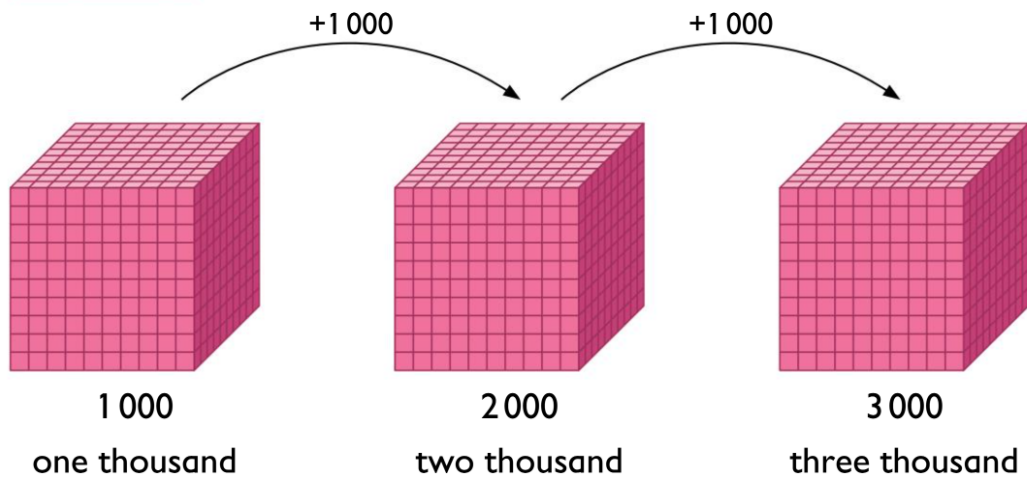
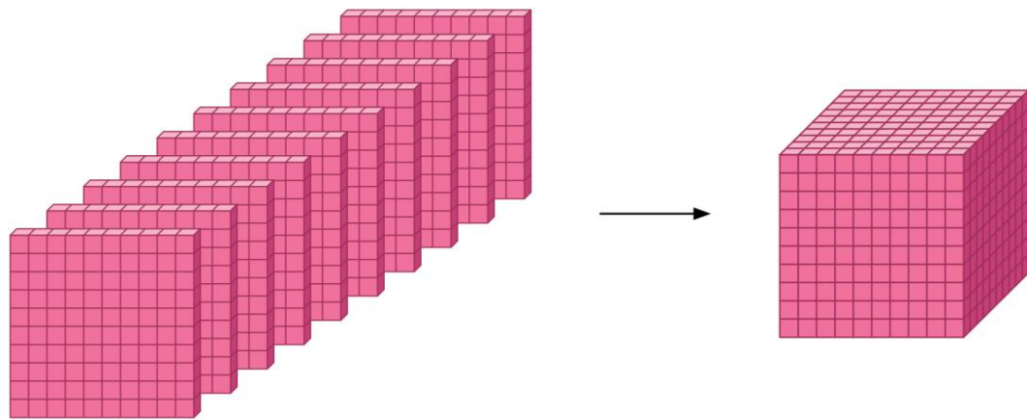
Keep counting
in 100s to 1 000.





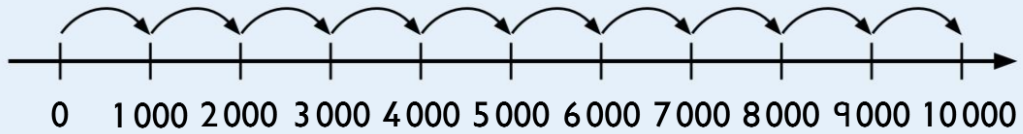
Do you know how many small blocks there are in 10 boards of hundreds?

- (d) 10 boards of 100 small blocks each can make a large block containing 1 000 small blocks. It represents a thousand. Counting in 1 000s is as easy as counting in 1s, 10s or 100s.

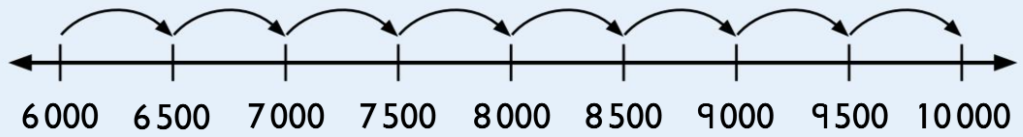


2 Let's use a number line to count to 10 000.

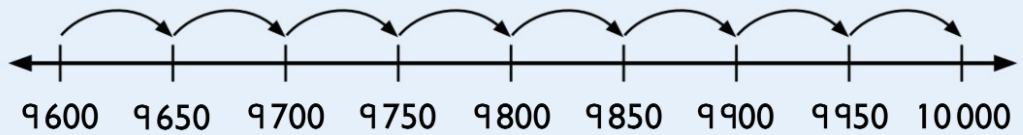
(a) Count in steps of 1 000s:



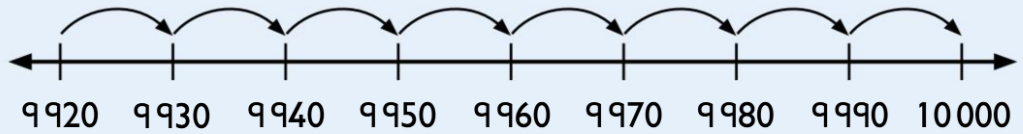
(b) Count in steps of 500s:



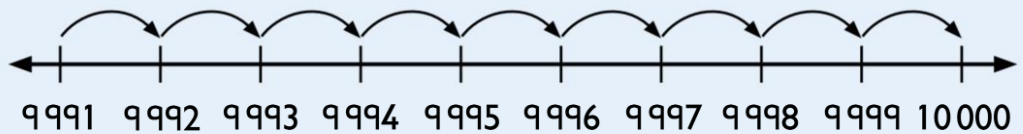
(c) Count in steps of 50s:



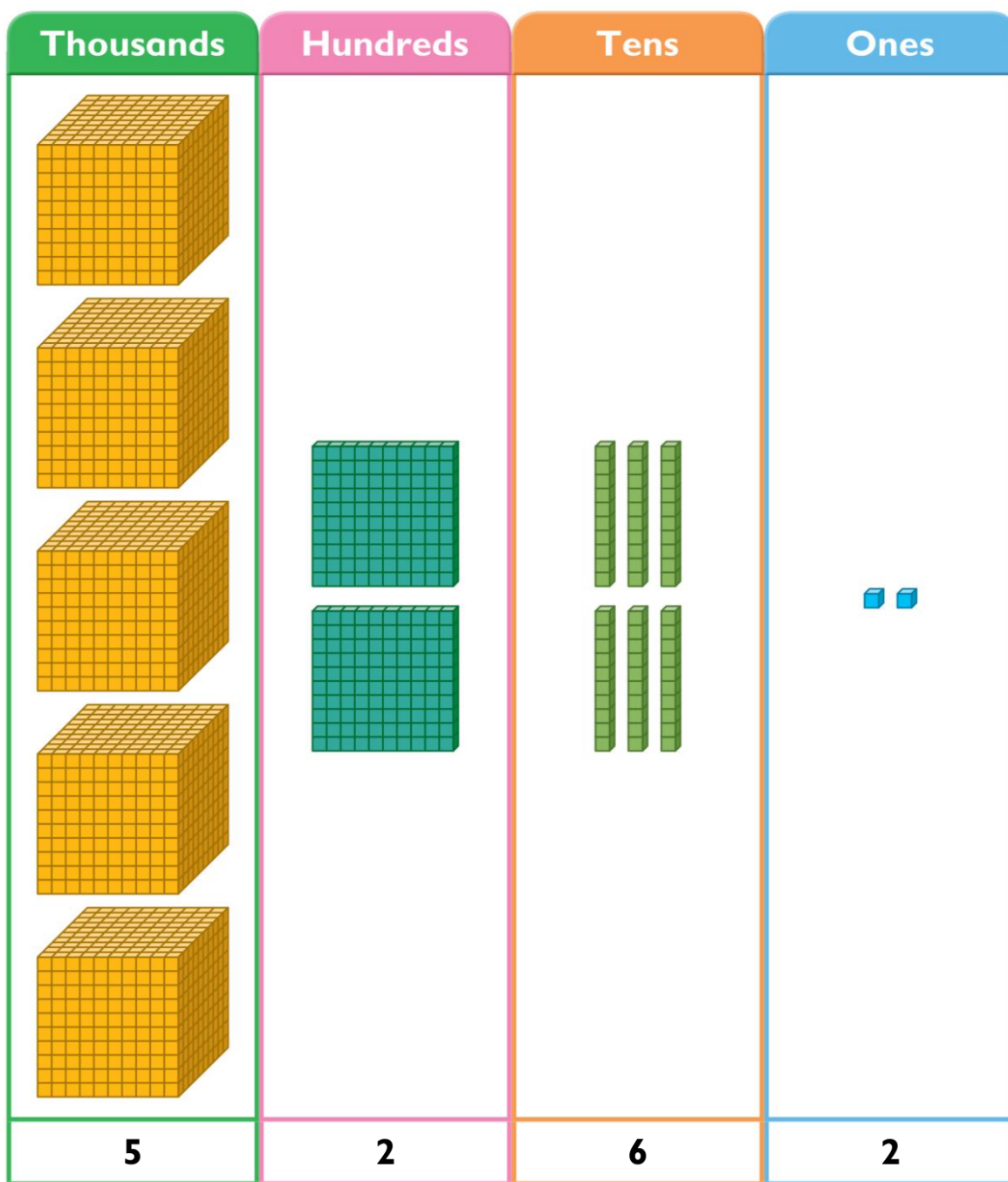
(d) Count in steps of 10s:



(e) Count in steps of 1s:



3 Let's learn to write some numbers in words.



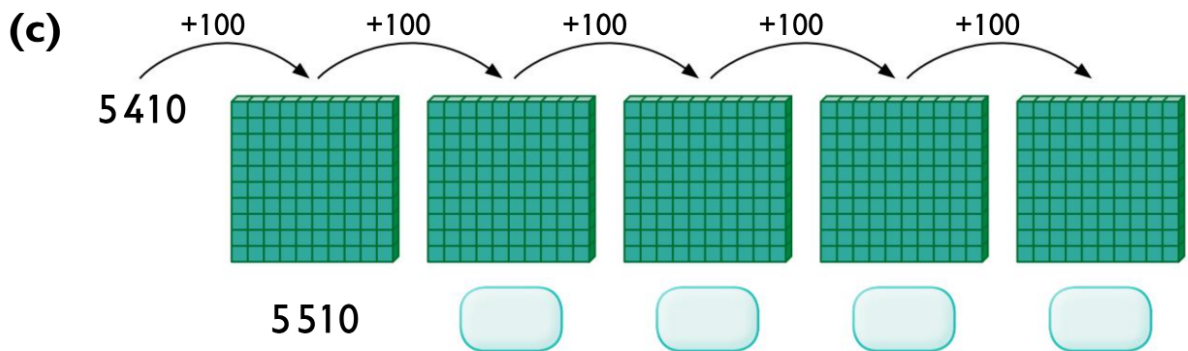
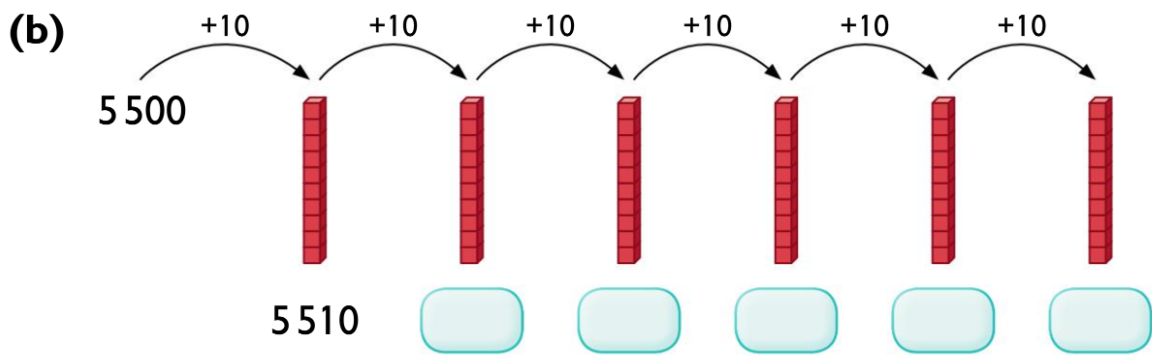
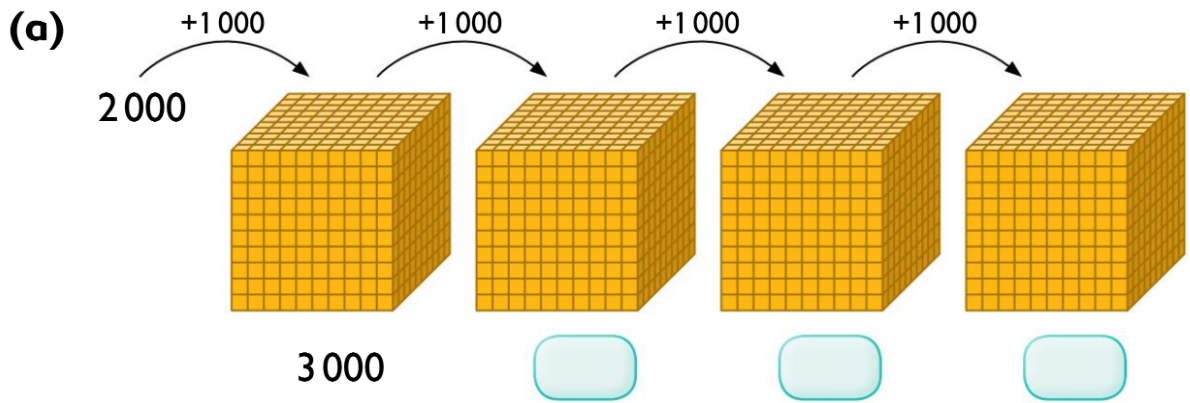
5 262 written in words is five thousand, two hundred and sixty-two.



Do you know that the number just before 5 262 is 5 261 and the number just after 5 262 is 5 263?

Let's Try It

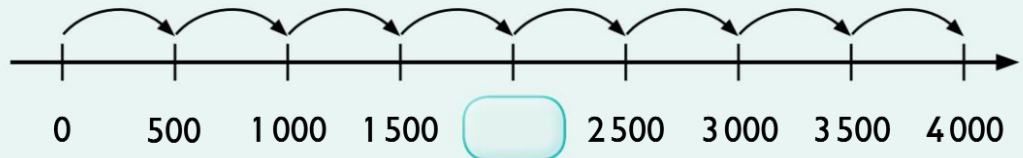
1 Complete counting the following.



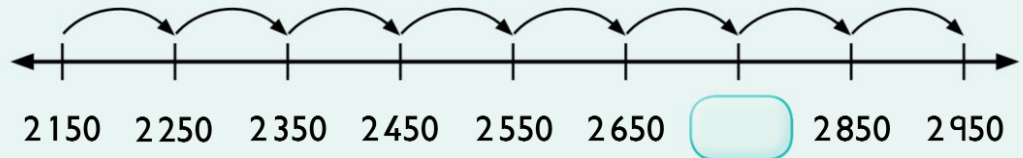


2 Fill in the missing number in each box.

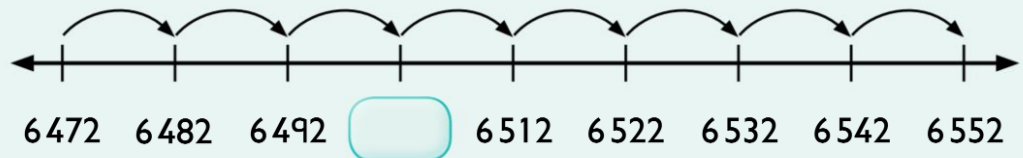
(a)



(b)

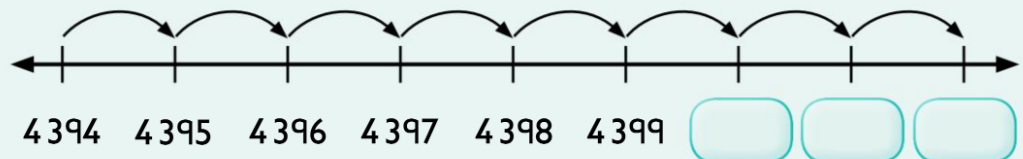


(c)

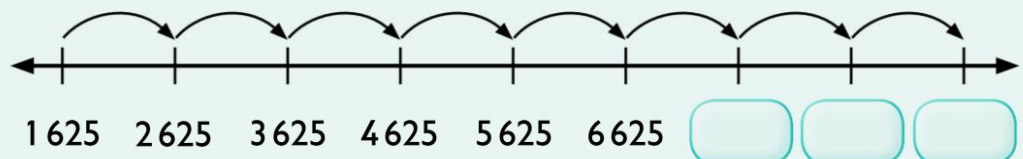


3 Fill in the missing numbers.

(a)



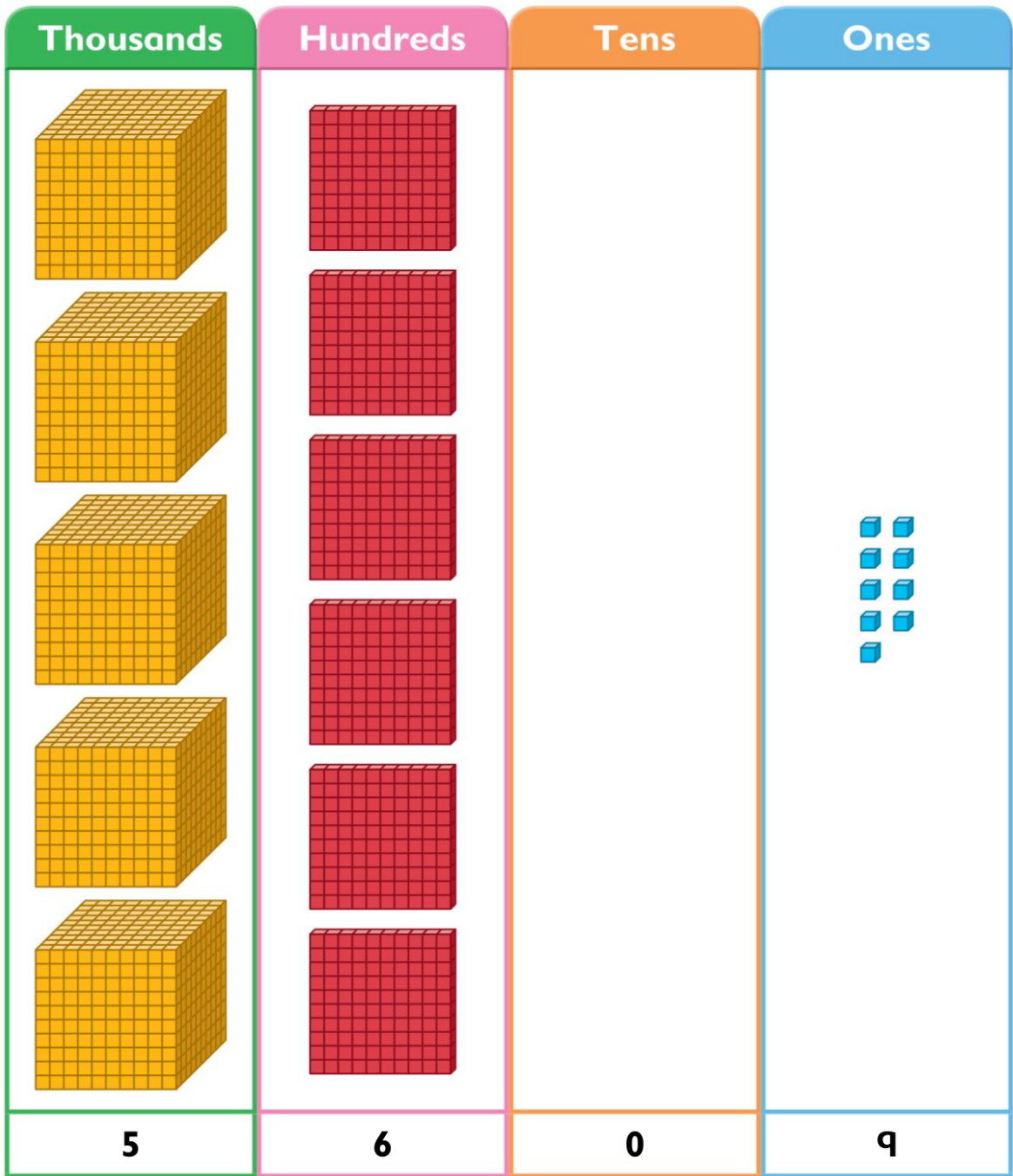
(b)





4

Look at the place-value chart and write the number in words.







Let's Practise

1 Write how the numbers are being counted.

(a) 800, 900, 1 000, 1 100, 1 200 Counting by s.

(b) 1 234, 2 234, 3 234, 4 234, 5 234 Counting by s.

(c) 8 300, 8 350, 8 400, 8 450, 8 500 Counting by s.

(d) 4 420, 4 422, 4 424, 4 426, 4 428 Counting by s.



2 Fill in the blanks.

(a) 100, 1 100, 2 100, 3 100, , , 6 100, 7 100

(b) , , 4 500, 5 000, 5 500, 6 000, 6 500

(c) 2 000, 2 005, 2 010, 2 015, , , 2 030, 2 035

(d) 8 789, 8 791, 8 793, 8 795, , ,

3 Write the numbers in words.

(a) 3 715

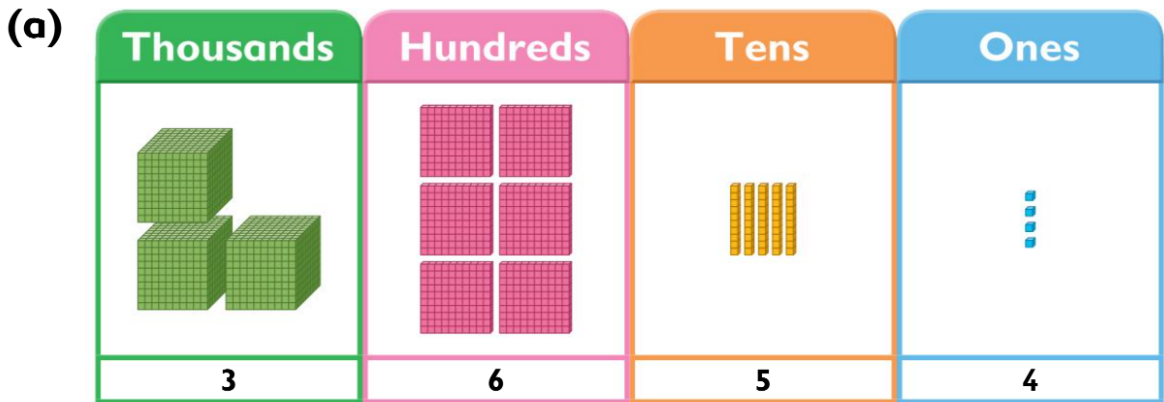
(b) 6 080

(c) 9 903

Place value to 10 000

Let's Learn Together

- 1 Let's show some numbers using place-value charts and beads.



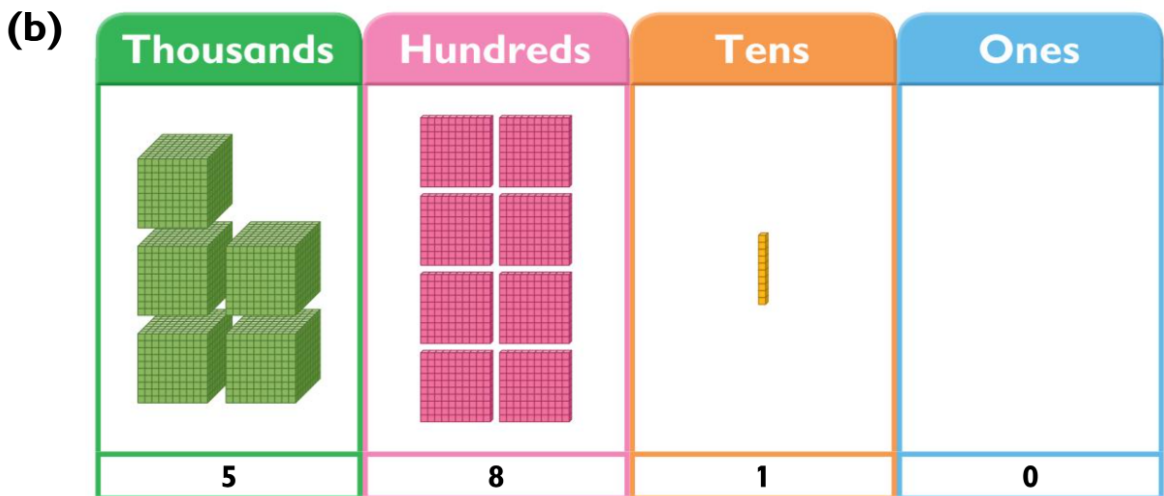
The digit in the **Thousands** place is 3. It represents 3 000.

The digit in the **Hundreds** place is 6. It represents 600.

The digit in the **Tens** place is 5. It represents 50.

The digit in the **Ones** place is 4. It represents 4.

So, $3\ 000 + 600 + 50 + 4 = 3\ 654$.



The digit in the **Thousands** place is 5. It represents 5 000.

The digit in the **Hundreds** place is 8. It represents 800.

The digit in the **Tens** place is 1. It represents 10.

The digit in the **Ones** place is 0. It represents 0.

So, $5\ 000 + 800 + 10 = 5\ 810$.

- 2 Find the value of the digit shown in each number.



There is a 5 in the Thousands place.



5 0 1 8

There is an 8 in the Ones place.



(a) 5 0 1 8
↑

The digit 1 is in the Tens place. It has a value of 10.

(b) 6 2 7 9
↑

The digit 2 is in the Hundreds place. It has a value of 200.



(c) 9 4 3 3
↑

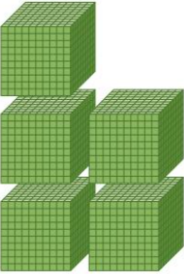
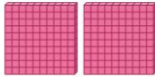


The digit 9 is in the Thousands place. It has a value of 9000.

(d) 1 5 4 7
↑

The digit 7 is in the Ones place. It has a value of 7.

Let's Try It

1 Complete the following.

Thousands	Hundreds	Tens	Ones
			
5	2	7	6

The digit in the **Thousands** place is . It represents .

The digit in the **Hundreds** place is . It represents .

The digit in the **Tens** place is . It represents .

The digit in the **Ones** place is . It represents .

So, + + + = .

2 Write the value of the digit that is circled.

(a) 5028

(b) 1046

(c) 8832

(d) 7926

(e) 3744

(f) 8516

Let's Practise

1 Write the digit that is in the Tens place.

(a) 1 634

(b) 9204

(c) 2793

2 Write the digit that is in the Thousands place.

(a) 2991

(b) 5487

(c) 4310

3 Write the digit that is in the Hundreds place.

(a) 7190

(b) 3711

(c) 6294

4 Fill in the blanks.

(a) In 4287, the digit 8 is in the place.

(b) In 6018, the digit 6 is in the place.

(c) In 9254, the digit 2 is in the place.

5 Complete the following.

(a) $5\,000 + 400 + 80 + 3 =$

(b) $1\,000 + 200 + 10 + 7 =$

(c) $4\,000 + 50 + 1 =$

(d) $2\,000 + 900 =$

(e) $9\,000 + 600 + 9 =$

