



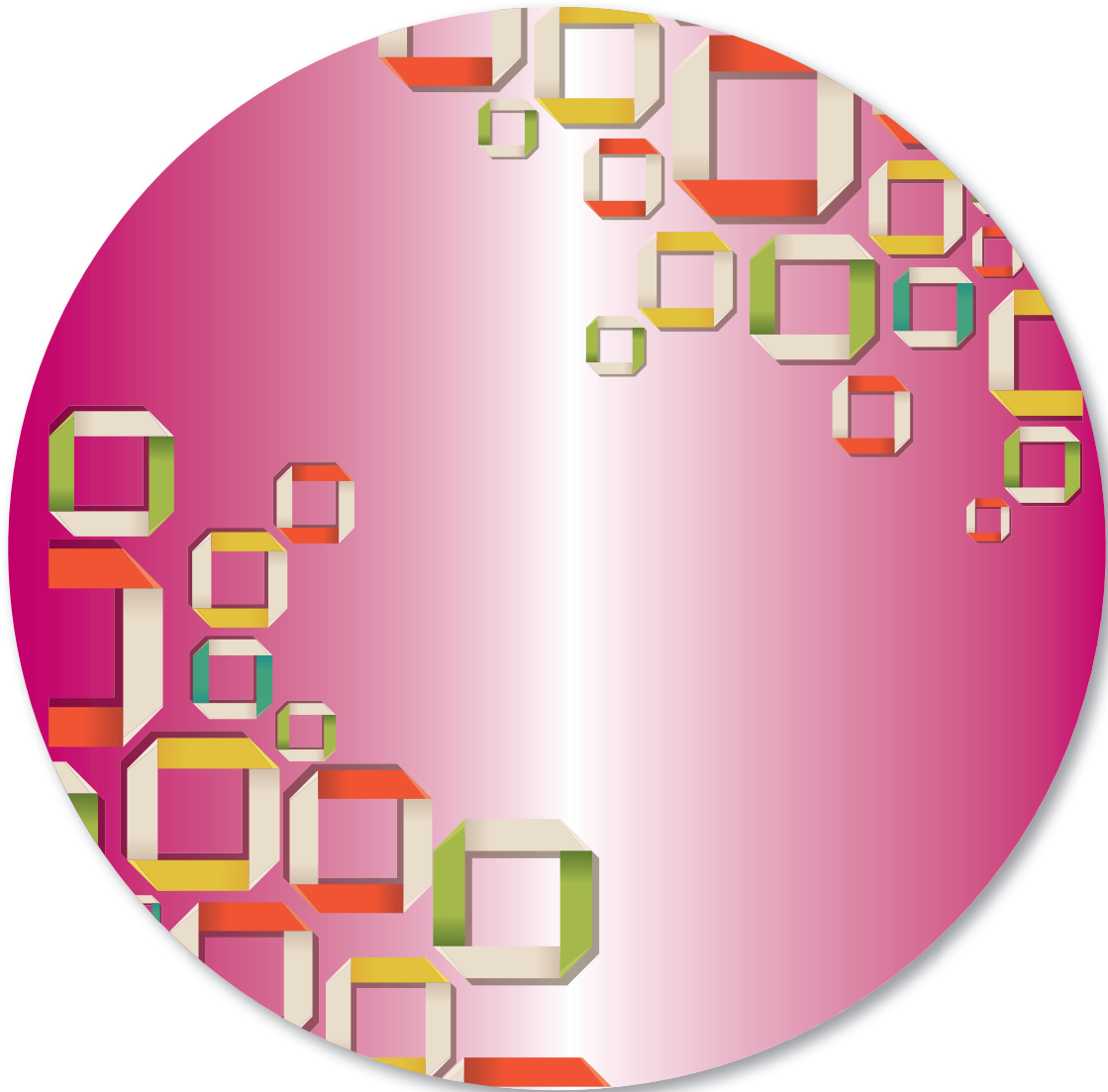
Maths Matters 2

Prabha Sethy



Collins

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Preface

Maths Matters (Updated Edition) is a series of eight books for Classes 1 to 8. The series is based on the **new syllabus** prescribed by the **Council for the Indian School Certificate Examinations**. In line with the new syllabus, a thematic and structured approach has been followed and all the new topics suggested in the syllabus have been included.

In this updated edition, strong emphasis is placed to develop the ability of investigation, analysis and problem-solving. The approach followed in the books would facilitate hands-on experiences and enable children to link mathematics with day-to-day life experiences. Following the guidelines laid down in the syllabus, these books aim to enable students to see mathematics as something to talk about, to communicate, to discuss among themselves, to work together on. Sufficient number of solved examples, exercises and mental maths questions are provided to ensure a holistic grasp of the mathematical thought process.

Some Key Features

Why This Theme Matters points out real-life applications of the theme

Let's Get Started to revise the concepts learnt earlier

Hints and Tips for better conceptual understanding

Try These to test student's understanding of the topic covered

Note brings the focus to certain important points

Remember to highlight key points of the concept discussed

Exercise to revise the topics just learnt

Revision Exercise for a well-integrated review of the concepts covered in a chapter

For the Curious Mind to encourage students to think beyond the textual knowledge

Enrichment Zone to enhance continuous learning by extending the concepts one-step ahead

Theme Worksheet, after each theme, to reinforce practice with fun exercise

Skill-based Worksheet, after each theme, to develop analytical and problem-solving skills

Mental Maths to sharpen the calculation skills and logical reasoning

Project to extend the concept learnt to real-life applications

We would like to take this opportunity to thank all the teachers who reviewed the books and provided their valuable feedback. Special thanks to Ms Indrani Shome, formerly a teacher of LakshmiPat Singhania Academy, Kolkata, and Ms Sunita Sinha, Principal of Gulmohur High School, Jamshedpur, for giving their suggestions, which helped in improving the quality of the content.

Any suggestions or constructive criticism from the users are welcome. We shall try to incorporate those in the future editions.

Author

Key Features

Why This Theme Matters

Points out real-life applications of the theme

Why this Theme Matters

Life is full of numbers. All around us we see objects which we need to count. For counting objects, we need to learn how to count and understand numbers.

Let us sing a poem together,



Mental Maths

1. Write the place value of the underlined digits:

a. 9782485

b. 7681984

Mental Maths

To hone the calculation skills and logical reasoning.

Try These!

To test student's understanding of the concept

Try These!

$$3 \times 2 = \underline{\quad}$$

$$5 \times 2 = \underline{\quad}$$

$$7 \times 2 = \underline{\quad}$$

$$9 \times 2 = \underline{\quad}$$

Note

Bigger objects may not necessarily be heavier than smaller objects. A lock is heavier than a pencil box



Note

To bring the focus to certain important points

Hints and Tips

To provide hints and tips for better understanding of the concept

Hints and Tips

Distinguish between the terms Cost Price and Actual Cost. Always remember that if overhead expenses are mentioned in the question, then Actual cost = CP + Overhead expenses.

Remember

When we subtract 0 from a number, the value of the number remains the same; it does not decrease.

$$12345 - 0 = 12345$$

$$56789 - 0 = 56789$$

Remember

To highlight key points of the concept discussed

Exercises

To revise the concepts just learnt

Exercise 9.2

- 1 A lamp costs ₹835 and a book costs ₹ _____

	H	T	O
Lamp costs	8	3	5
Book costs	₹	_____	_____

Thus, both the things cost ₹ _____

- 2 Ram has ₹750, Shyam has ₹525. How much more money does Shyam have than Ram?

Ram has ₹ _____

Shyam has ₹ _____

Thus, Ram has ₹ _____ more than Shyam.

Revision Exercise

At the end of each chapter for a comprehensive review of the concepts

Revision Exercise

1 Choose the correct options.

- a. $24 \times 1000 =$
i. 24 ii. 240 iii. 2,400
- b. $56 \times 200 =$
i. 200 ii. 11,200 iii. 112
- c. $569 \times 7 =$
i. 3,983 ii. 3,987 iii. 5,697
- d. $8959 \times 9 =$
i. 80,630 ii. 80,631 iii. 80,367
- e. $72395 \times 5 =$
i. 3,61,095 ii. 3,61,555 iii. 3,61,550

For the Curious Mind

- From the numbers below, find the correct answer.
355, 500, 710, 183, 940
- What number am I?
- I am between 100 and 200. _____
 - I am 5 more than 350. _____
 - I am greater than 900. _____
 - I am between 490 and 510. _____
 - I am 10 more than 700. _____

For the Curious Mind

To encourage students to think beyond the textual knowledge

Enrichment Zone

To enhance continuous learning by extending the concepts one-step ahead

Enrichment Zone

Addition of Two 3-digit Numbers Without Regrouping

Let us learn to add two 3-digit numbers without regrouping. Let us understand this through an example.

Example 1: Add 345 and 523.

Step 1	H	T	O	First, write these numbers one below the other.	Step 2	H	T	O	Add the numbers in the ones column. $2 + 3 = 5$. Write 5 below 3.
	3	4	5			3	4	5	
+	5	2	3		+	5	2	3	
									5

Step 3	H	T	O	Next, add the numbers in the tens column. $4 + 2 = 6$. Write 6 below 2.	Step 4	H	T	O	Then, add the numbers in the hundreds column. $3 + 5 = 8$.
	3	4	5			3	4	5	
+	5	2	3		+	5	2	3	
									5
									6
									8

Theme Worksheet 4

- Put a tick (✓) on the most appropriate answer.
 - Which of the following can be used to measure the length of a cubit? Footspan Handspan
 - Which of the following can be used to measure the length of a classroom? Footspan Cubit Handspan
 - Which is the heaviest object among the following? Chalk piece Notebook Eraser
 - Which is the lightest among the following? Lemon Orange Jackfruit
 - Which of the following has the least capacity? Spoon Cup Mug

Theme Worksheet

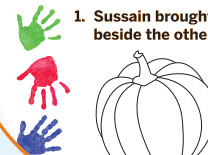
To reinforce practice with fun exercise

Skill-based Worksheet

To develop analytical and problem-solving skills

Skill-based Worksheet

- Sussain brought some vegetables beside the other as shown.



Test Paper 1

- Write the number and the number name.
Number _____ Number Name _____
- Circle the biggest and tick the smallest.
14 8 19 3 1
- Fill in the blanks.
 - _____ is just before 17.
 - _____ is between 10 and _____.

Test Paper

To provide more practice after every few chapters

Collins DigiSuite is an innovative digital solution for teachers. It contains four modules delivering classroom content that can be used to effectively integrate the teaching and evaluation tools with the coursebooks.



The **E-book** includes animations, interactive exercises and worksheets. The E-book reader also includes interactive teaching tools like pen tool, text highlighter, page zoom, search and bookmark.



The **Test Generator** is a question bank with a variety of questions for effective evaluation. It is an easy-to-use assessment tool for the teachers to create test papers and worksheets.



The **Teacher's Resource** consists of lesson plans, answer keys and teaching techniques for the teachers.



This module has a PDF of the **Collins dictionary** appropriate for each level with all the words and definitions one needs.

Contents

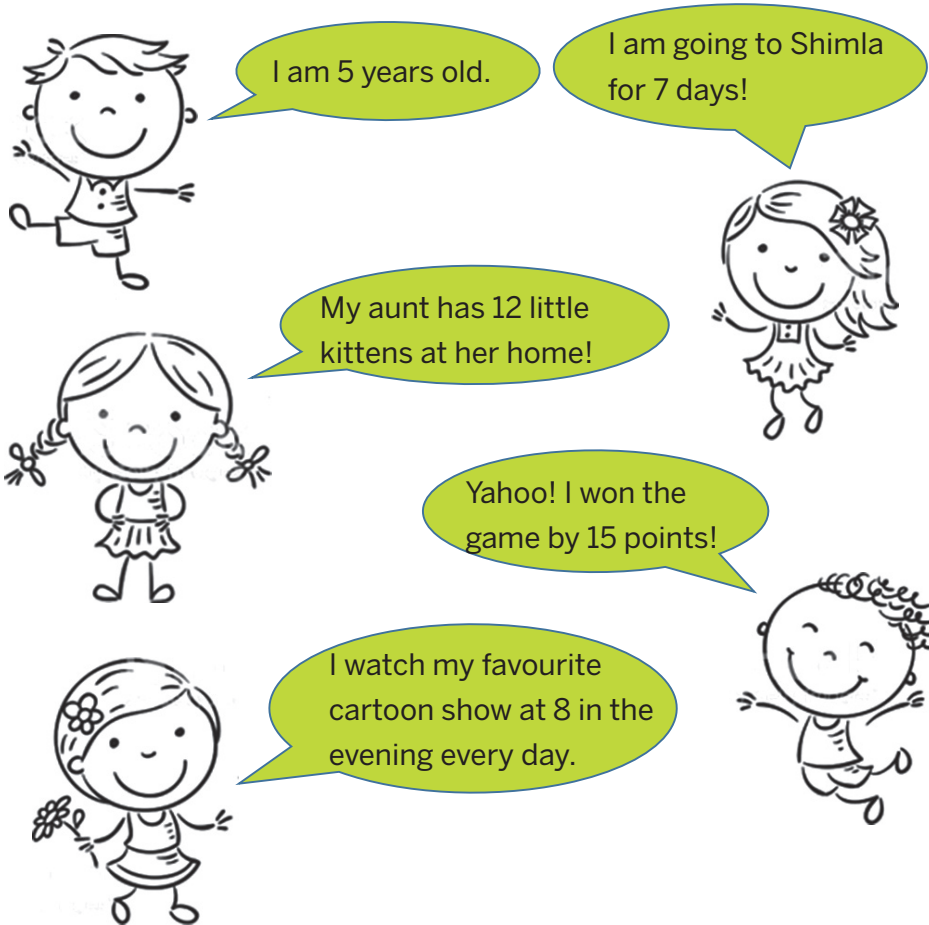
Theme 1: Numbers	9	Theme 4: Measurement	110
1. Numbers up to 999	10	7. Measurement	111
Theme Worksheet 1	27	8. Time	122
Skill-based Worksheet	28	Theme Worksheet 4	132
		Skill-based Worksheet	133
Theme 2: Number Operations	29	Theme 5: Data Handling	134
2. Addition	30	9. Data Handling	135
3. Subtraction	46	Theme Worksheet 5	144
4. Multiplication	58	Skill-based Worksheet	145
5. Introduction to Division	80	Theme 6: Patterns	146
Theme Worksheet 2	91	10. Patterns	147
Skill-based Worksheet	93	Theme Worksheet 6	151
		Cross-curricular Worksheet	152
Theme 3: Geometry	94	Test Papers	153
6. Shapes	95	Answers	161
Theme Worksheet 3	108		
Cross-curricular Worksheet	109		

Numbers

Why This Theme Matters

Every now and then we talk about numbers. Besides telling 'how many', numbers are used in other ways as well.

Read these sentences carefully. Circle the numbers in the sentences.



Make two sentences of your own that have numbers. Write them in the space below.

.....

.....



Numbers up to 999

1

Let's Get Started

Let us revise what we have learned in Class 1.

1. Write the number names of the following numbers.

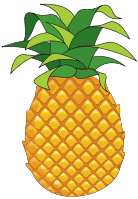
a. 8 _____

b. 12 _____

c. 39 _____

d. 57 _____

2. In the pictures given below, circle the second picture and cross the fifth picture.



3. Fill in the blanks.

a. _____ comes just before 62.

b. _____ comes just after 79.

4. Fill in the blanks.

a. $35 =$ _____ tens _____ ones

b. $69 =$ _____ tens _____ ones

5. In 78, the

a. place value of 7 is _____.

b. face value of 7 is _____.

6. Circle the largest number among the numbers given below.

13 92 58 7 62

7. Write the following numbers in decreasing order.

12 89 5 73 61

_____, _____, _____, _____, _____

Introduction to 3-digit Numbers

In Class 1, we have learned numbers from 1 to 99. If we add 1 to 99, we get 100
 $99 + 1 = 100$.

The number name for 100 is 'one hundred'. 100 is a 3-digit number.

Hundreds		
	Tens	Ones
1	0	0

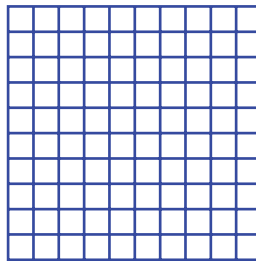
The digit **0** is at the ones and tens place, and **1** is at the hundreds place.

We can write it as:

Hundreds	Tens	Ones
1	0	0

100 is the Smallest 3-digit Number

100 can be represented as a block shown below.

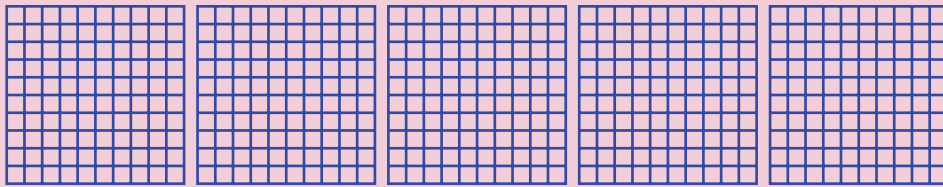


Note

This block has one hundred squares. There are 10 squares in each column.

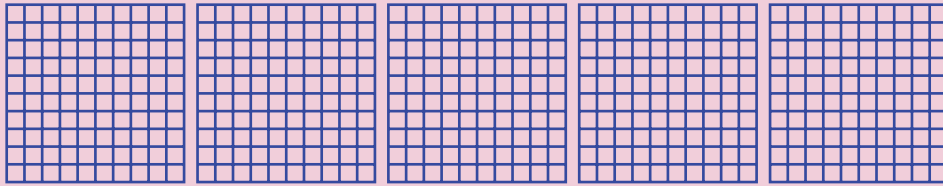
Counting by Hundreds

Blocks of 100	Numeral	Number Name
	200	Two hundred
	300	Three hundred
	400	Four hundred

Blocks of 100**Numeral Number Name**

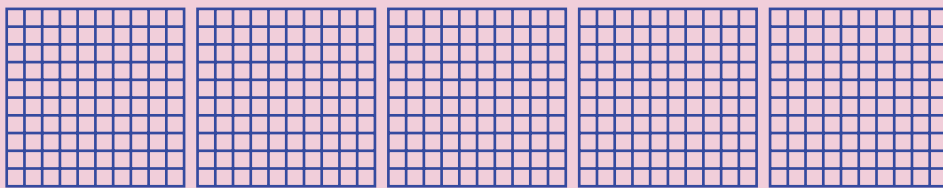
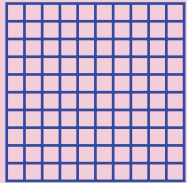
500

Five hundred



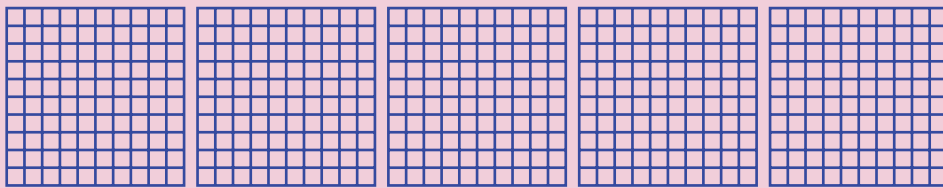
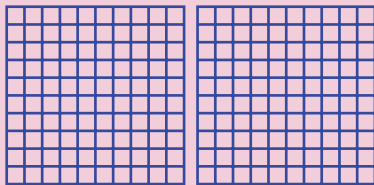
600

Six hundred



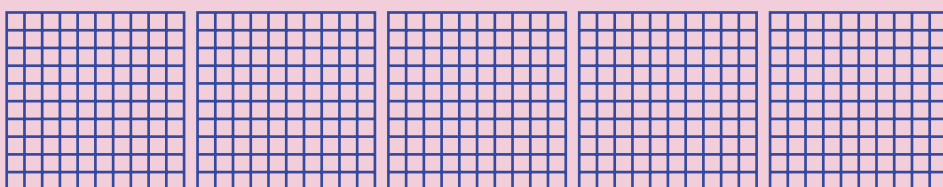
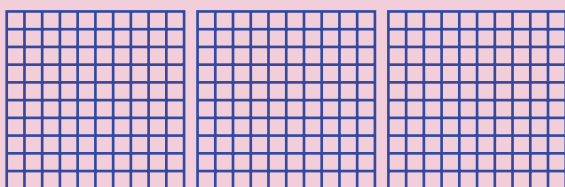
700

Seven hundred



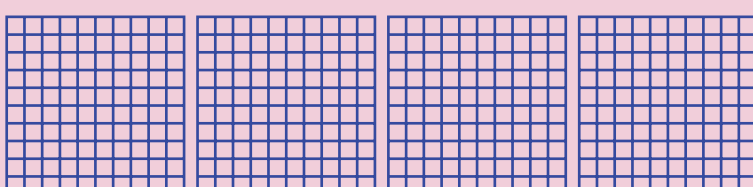
800

Eight hundred



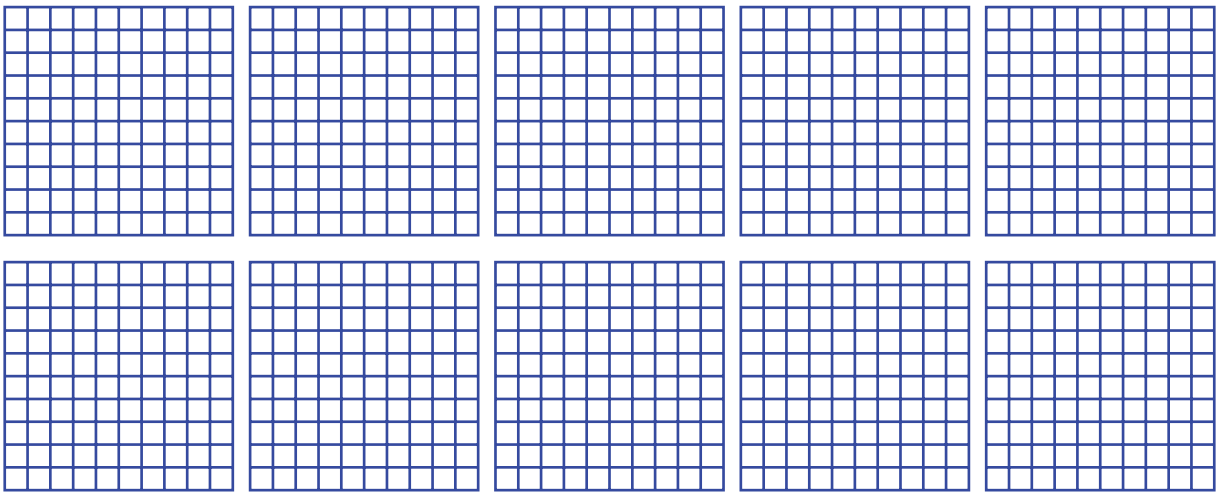
900

Nine hundred



The Number 1000

If we combine ten blocks of 100, we get ten hundreds, that is, 1000.



1000 is read as 'one thousand'. 1000 is the smallest 4-digit number.

Forming 3-digit Numbers

Let us learn some more 3-digit numbers.

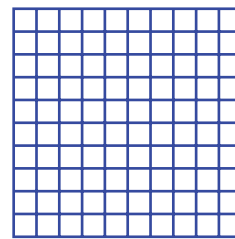
Let us take a 3-digit number, 105.

This number is shown using blocks as:

We can write it as:

Hundreds	Tens	Ones
----------	------	------

1	0	5
---	---	---



1 hundred



5 ones

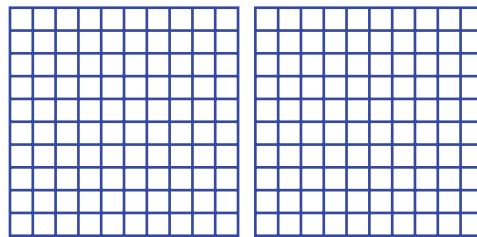
= 105

Let us take another example, 269.

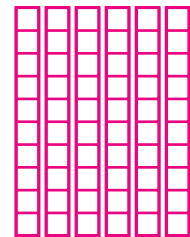
We can write it as:

Hundreds	Tens	Ones
----------	------	------

2	6	9
---	---	---



2 hundreds



6 tens



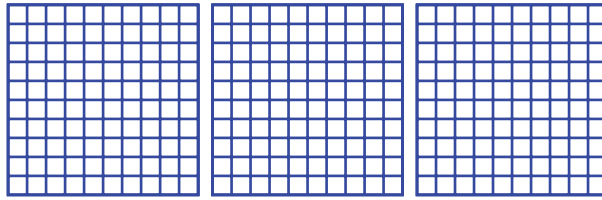
9 ones



Try This!

Sudha has collected some coins. The number of coins is a 3-digit number.

The number can be represented using blocks as given below. Find the number.



_____ hundreds



_____ tens

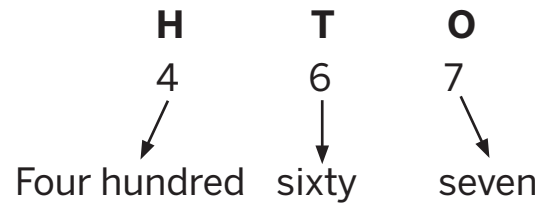


_____ ones

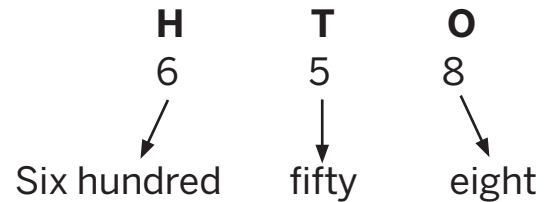
Reading 3-digit Numbers

Let us see how the number 467 is read.

467 is read as four hundred sixty-seven.



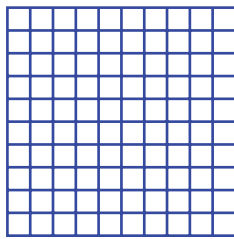
Similarly, the number 658 is read as six hundred fifty-eight.



Exercise 1.1

1 Fill in the blanks.

a.



_____ hundred



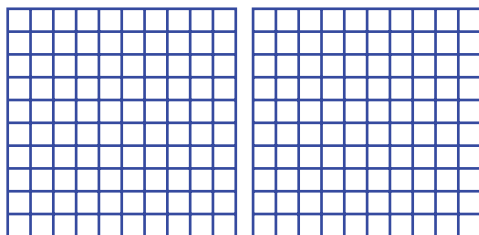
_____ tens



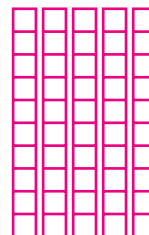
_____ ones

Number name = _____

b.



_____ hundreds

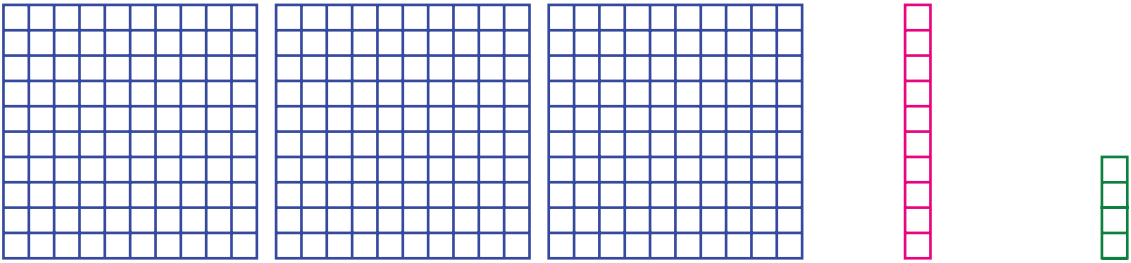


_____ tens



_____ ones

Number name = _____

c. 

_____ hundreds _____ tens _____ ones

Number name = _____

2 Fill in the blanks.

- a. 265 = _____ hundreds _____ tens _____ ones
Number name = _____
- b. 934 = _____ hundreds _____ tens _____ ones
Number name = _____
- c. 428 = _____ hundreds _____ tens _____ ones
Number name = _____
- d. 703 = _____ hundreds _____ tens _____ ones
Number name = _____

3 Write the numerals for the following number names.

- a. Five hundred twenty-eight _____ b. Seven hundred thirteen _____
c. Nine hundred ninety-nine _____ d. Two hundred eighty-seven _____
e. Six hundred thirty-one _____ f. One hundred sixty-four _____

4 Write four numbers that come after the following numbers.

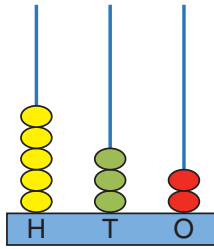
- a. 241, _____, _____, _____, _____ b. 536, _____, _____, _____, _____
c. 912, _____, _____, _____, _____ d. 829, _____, _____, _____, _____

5 Circle the number that comes just after the following numbers.

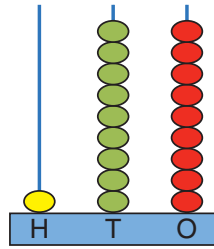
- | | | | | | | | |
|--------|-----|--------|-----|--------|-----|--------|-----|
| a. 246 | 312 | b. 739 | 824 | c. 549 | 329 | d. 921 | 922 |
| | 247 | | 900 | | 467 | | 578 |
| | 189 | | 740 | | 923 | | 216 |
| | 200 | | 123 | | 550 | | 190 |

Representing 3-digit Numbers on the Abacus

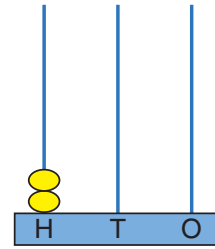
532 will be represented on the abacus as:



199 will be represented on the abacus as:

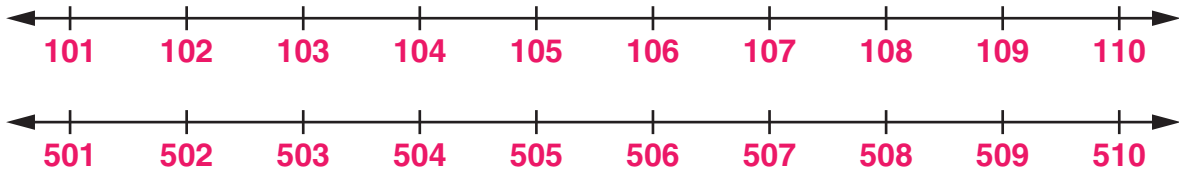


200 will be represented on the abacus as:



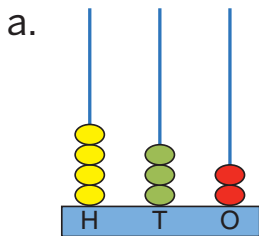
Representing 3-digit Numbers on the Number Line

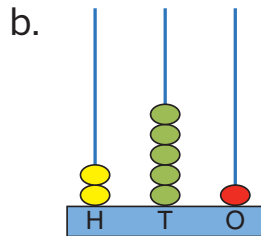
The number line continues as the numbers get bigger. Some numbers showing parts of the number line are shown below.

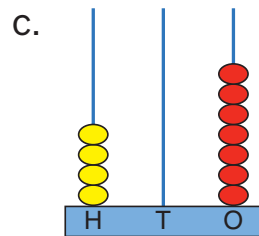


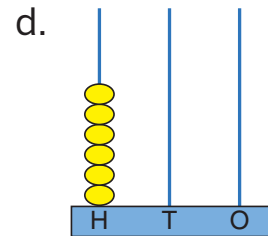
Exercise 1.2

1 Write the number represented on each abacus.



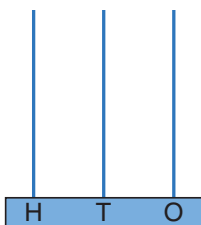




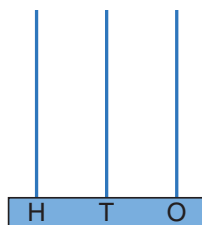


2 Show the following numbers on the given abacuses.

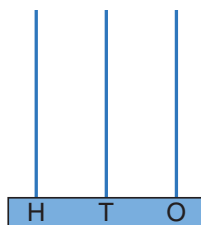
a. 157



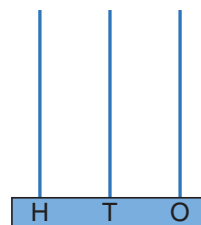
b. 341



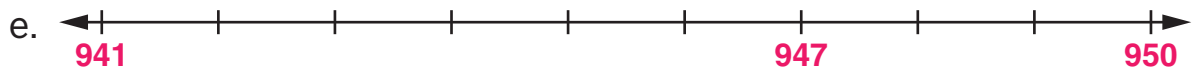
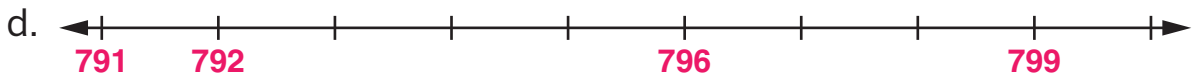
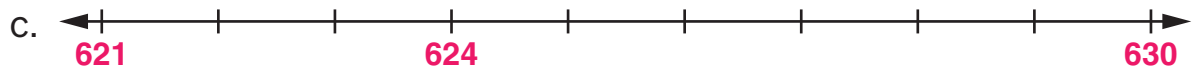
c. 209



d. 500



3 Fill in the missing numbers on the number lines.



Expanded Form of 3-digit Numbers

Let us discuss how to write the expanded form of 3-digit numbers.

Example 1: Write the expanded form of 396.

H T O

3 9 6 = 3 hundreds 9 tens 6 ones

OR

3 9 6 = 300 + 90 + 6


Example 2: Write the expanded form of 782.

H T O

7 8 2 = 7 hundreds 8 tens 2 ones

OR

7 8 2 = 700 + 80 + 2



Try These!

1 3 5 = _____
hundred _____ tens
_____ ones.

OR

1 3 5 = _____ +
_____ + _____.