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## MATHEMATICS

## CLASS - II جانـتوروّم

## PART-2 2 - 2



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Grow by Education Behave Humbly


2022-23-4

## MATHEMATICS CLASS - II (Part-2)



Published by
The Government of Telangana, Hyderabad.

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## First Published 2011

New Impressions 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022

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## Free Distribution by T.S. Government 2022-23

Printed in India
at the Telangana Govt. Text Book Press,
Mint Compound, Hyderabad,
Telangana.

# Textbook Development \& Publishing Committee 

Chief Executive Officer : Smt. B. Seshu Kumari<br>Director, SCERT, Hyderabad<br>Executing Chief Organizer : Sri. R. Jesupadam Director, Government Textbook Press, Hyderabad<br>Organising Incharge : Dr. Nannuru Upender Reddy<br>Prof. Curriculum \& Textbook Department<br>SCERT, Hyderabad

## Writers

Sri. J. Guravayya, m.R.P., Puttoor Mandalam, Chittoor District.
Sri. P. Ramesh, Teacher, M.P.P.S. M.M. Puram, Vedurukuppam Mandalam, Chittoor District.
Sri. T. Lakshman Kumar, Teacher, M.P.P.S. Gonugiri, Kuppam Mandalam, Chittoor District.
Sri. C.H. Keshava, m.R.P. Meryalaguda Mandalam, Nalgonda District.
Sri. K.V. Syamasundharacharyulu, Teacher, M.P.S. Kottapalli, Vardhannapeta Mdl., Warangal District
Sri. Y. Venkata Reddy, Teacher \& S.R.G. Member, ZPHS, Kudakuda, Nalgonda District.
Sri. K. Rajender Reddy, Teacher \& S.R.G. Member, U.P.S. Thimmapur, Chandampeta Mandal, Nalgonda District

## Coordinator

Sri. K. Bramhaiah, Professor,S.C.E.R.T., Hyderabad Assistance organising incharge
Sri. K. Yadagiri, Lecturer,, S.C.e.r.T., Hyderabad

## Editors

Sri. K.K.V. Rayalu, Lecturer, IASE, Hyderabad Dr. P. Ramesh, Lecturer, IASE, Nellore.


Dr. S. Sureshbabu, AMO, Rajiv Vidya Mission, (SSA), Hyderabad
Sri. B. Harisarvothama Rao, Lecturer (Retd.), s.C.E.R.T., Hyderabad

## Translator

Sri. K. Venugopal Rao, A.P.E.S. (Ret..), SCERT, Hyderabad.

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## FOREWORD

Classes I and II are very important in school education. We consider them the foundation. The learning by children at higher classes depends on skills of Language and Mathematics they acquire at the primary stage. Children have some mathematical concepts before they come to school. The learning of mathematics must be built on the foundation of the concepts known to them.

Children use mathematics at every life situation. They estimate, calculate and compare quantities in an informal way and in meaningful situations. With a view to bidding farwell to rote learning and beginning to learn mathematics, textbooks for classes I and II were prepared.

Units have been prepared in such a manner that pupils construct knowledge through investigation, observation and achieve mathematical concepts in accordance with the basic principles laid down in National Curriculum Framework 2005 and Right to Education 2009. Meaningful 'Activities' and 'Exercises' were included such that children understand mathematical concepts and utilise their knowledge. Mathematical concepts were introduced in each unit of this book beginning with events in pupil's life, games they play and so on. Activities and exercises ensure that pupils acquire skills like understanding concepts, solving problems in a systematic way, thinking logically, expressing ideas in mathematical language etc. The book contains a large number of pictures besides different situations and activities to ensure proper understanding of concepts.

With an intention to help the students to improve their understanding skills in both the languages i.e. English and Urdu, the Government of Telangana has redesigned this book as bilingual textbook in two parts. Part-1 comprises 1 to 10 lessons and Part-2 comprises 11 to 19 lessons.

Learning mathematics is every child's right. Children can achieve mastery over numbers and the four mathematical operations by utilising these textbooks which have been prepared to create interest for mathematics and to ensure learning with enthusiasm. The requisite teaching-learning material should be prepared and ensure proper utilisation of children's learning time by organising teaching-learning processes. This is the first step towards preparing the textbooks in the new system. We wish all the teachers will implement this and ensure that pupils achieve the mathematical skills specified for classes I and II.

31-03-2011
Hyderabad

## Smt. B.Seshukumari

Director, SCERT., Hyderabad.



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## NOTE TO TEACHERS

- Mathematics textbooks for classes I and II were prepared according to the basic principles suggested in NCF-2005 and the guidelines given under RTE-2009.
- Units were prepared in such a manner that pupils can learn mathematics with enthusiasm.
- Every unit includes the mathematical concepts known to pupils and new concepts for the unit concerned besides appropriate exercises.
- The exercises have been prepared to ensure introduction of concepts through day - to - day / meaningful situations, to get pupils to solve problems that involve logical thinking, to express ideas in mathematical language and so on.
- Exercises and activities are so planned that by the end of class I. pupils will be able to understand the concepts of number, acquire the ability to add and subtract numbers and by the end of class II, they will be able to add numbers with regrouping subtract numbers using the technique of borrowing, acquire the basic concepts of multiplication and division and so on.
- At the beginning of any unit, the pupils must helped to observe the pictures given. Questions must be asked to test their previous knowledge of mathematical concepts concerned. The concepts of the unit must be introduced accordingly. In this process, locally - available objects like pebbles, seeds, sticks, beads etc., must be made use of it must be orgnised as a classroom activity.
- Then group activities must be orgnised to solve problems in a systematic manner, to think logically, to estimate things and other exercises. This book includes certain instructions / suggestions for the teacher. Those instructions must be followed to take up questioning the pupils, discussing things with them, getting them to observe pictures, calculate and recording information etc.
- In the same way encourage pupils to understand the instructions given for problems before they can solve the problems by themselves.
- The textbooks have been prepared to help the pupils to take up exploration, observation, research, confirmation etc., to understand mathematical concepts and apply the knowledge for solving problems.
- Towards this end a number of pictures depicting pupil's real life situations have been included.
- Children use mathematics extensively in many day - to - day situations consequently they acquire skills of application. As these textbooks have prepared with this background, they are to be utilised completely and ensure utilisation of children's learning time.
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## Syllabus - Expected Outcomes

## Unit - 1: Revision - 1

- Numbers from 1 to 20
- Counting different things like animals, birds, trees and writing their number
- Saying the sequence of numbers of things and people and writing them
- Saying the number before, after and between the given numbrs upto 20
- Arranging numbers upto 20 in ascending and descending orders and matching them


## Unit - 2: Revision-2

- Counting the things intens and ones. Saying how many tens and ones there are in them
- Writing numbers upto 100 in the expanded form.
- Writing numbers upto 100 in ascending and descending order and matching with things
- Identifying the small and big numbers among the given number writing them.
- Solving certain problems orally
- Identifying numbers small and big relationship among
- Solving puzzles based on certain conditions (More, Less)


## Unit - 3 and 4: Comparing three-digit numbers

- Counting and saying the numbers as hundreds, tens and ones upto 1000 and writing them below
- Saying the place value and face value of digits in a number and writing
- Writing the 3-digit number in the expand form and writing the number when its expanded form is given
Saying how many Rs.100's, Rs.10's and Re.1's there are for a given three- digit number
- Writing numbers below 1000 in the correct sequence and also in ascending and descending orders



## بّ 1 : الاره -

اعراو 1 تا 20

 20


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\text { سبق 2: اعاره - } 2
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\text { اعגار } 12 \text { "تّ } 99
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100
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1000 , , , 1000 1 100

- Writing the numbers before, after and between given numbers below 1000
- Writing the given number (1000) in words and writing the number when it if given in words.
- Forming numbers using the three digits given and saying between
- Using >, <, = symbols to show smaller than about two numbers.


## Unit - 5 and 6: Addition of numbers

- Adding two digit numbers-both in expanded and short forms
- Adding numbers less than 50 orally
- Adding two numbers using the 'carry over' method.


## Unit - 7 and 8: Subtraction of numbers

- Subtraction of two digit number-both in expanded and short forms.
- Subtracting numbers upto 50 orally
- Subtracting two numbers using the 'borrowing' method.


## Unit - 9, 10 and 11: Multiplication

- Understanding that multiplication is nothing but successive addition of the same number
- Saying the product of numbers related to numbers in columns and rows
- Writing multiplication tables ( 1 to 9 ) by using the method of successive addition
- Writing the product of multiplying a two-digit number by a single-digit number.


## Unit - 12: Division

- Identifying division and the symbol ' $\div$ ' concerned.


Distributing a certain number of things among a certain number of people equally.

## Unit - 13: Length

- Measuring lengths using nonstandard measuring tools
- Valuing the standard tools of measurment.

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سبّ 5 اور 6 :

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سبّ 12: تصّ


سبّ 13 : طول
طول -

## Unit - 14: Weight

- Identifying the heavy and light things among things given


## Unit -15: Volume

- Identifying the more and less size among those given.


## Unit - 16: Time

- Describing when things are done in a day (morning, afternoon etc)
- Saying the names of days / months in a order


## Unit - 17: Money

- Identifying currency notes / coins
- Giving change for notes less than Rs. 100


## Unit - 18: Shapes

- Identifying different geometrical shapes without mentioning names like circle, square, rectangle, triangle etc. Compares and matches their shapes with things in daily life.


## Unit - 19: Let Us Record

- Counting things and recording the number in a table

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14 \text { : وزن }
$$



$$
\text { سبق } 15 \text { : }
$$

- 

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16 \text { : وتّت }
$$

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$$
17 \text { : رُّاوروتِّ }
$$

100
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צ' سّق 19 : اندرانحكيّ

## OUR NATIONAL ANTHEM

- Rabindranath Tagore

Jana-gana-mana-adhinayaka, jaya he
Bharata-bhagya-vidhata.
Punjab-Sindh-Gujarat-Maratha
Dravida-Utkala-Banga
Vindhya-Himachala-Yamuna-Ganga
Uchchhala-jaladhi-taranga.
Tava shubha name jage,
Tava shubha asisa mage,
Gahe tava jaya gatha,
Jana-gana-mangala-dayaka jaya he
Bharata-bhagya-vidhata.
Jaya he! jaya he! jaya he!
Jaya jaya jaya, jaya he!!

## PLEDGE

- Pydimarri Venkata Subba Rao
"India is my country. All Indians are my brothers and sisters.
Ilove my country, and I am proud of its rich and varied heritage.
I shall always strive to be worthy of it.
I shall give my parents, teachers and all elders respect, and treat everyone with courtesy. I shall be kind to animals

To my country and my people, I pledge my devotion.
In their well-being and prosperity alone lies my happiness."



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## CONTENTS

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## (11) Multiplication of Numbers - 2

1. Count the pencils shown below. Say how many are there?

Geeta said to Lata, "There are 15 pencils in each packet." How many pencils are there in 3 such packets? Lata calculated in the following way. You observe it. Calculate how many pencils there are.
 Get your pupils to observe the above method of multiplying numbers. Let them understand and solve the problems on multiplication.
年


5

$$
=40+5=45
$$


$=\quad \begin{aligned} 10 & +5 \\ & \times 3\end{aligned}$
$30+15$

$=$


$$
\begin{aligned}
& 2 \text { - } 11 \\
& \text { - } 1 \text { 重 重 }
\end{aligned}
$$

2. Observe the following multiplication of numbers. Do the others in the same way.




Fill in the blank boxes with the correct numbers.


Get your pupils to observe the above method of multiplication. Let them fill in the blank boxes with the correct numbers.

疗

$$
\begin{aligned}
\begin{array}{r}
3 \\
\times 3 \\
\times
\end{array} & =\begin{array}{r}
30+6 \\
\times 3
\end{array} \\
& =\frac{30 \times 3+6 \times 3}{30+18} \\
& =90+10+8 \\
& =100+8 \\
& =108
\end{aligned}
$$

刿

$10 \quad 8$

$$
\begin{aligned}
& \begin{array}{ll}
= & 108
\end{array}
\end{aligned}
$$



（b） $24=20+\square$
$\qquad$


Exercise

1. Multiply the numbers given below.
T O
(a) $\begin{aligned} & 1 \\ & \\ & \times \quad 5\end{aligned}$
T O
(b) 28
$\times \quad 2$
T O
(c) 24
$\times 3$
T O
(d) $1 \quad 5$
$\times 6$
$\qquad$
$\qquad$

(e) |  | T |
| :--- | :--- |
|  | O |
|  | 3 |

$\times \quad 4$
$\begin{array}{lll} & \mathrm{T} & \mathrm{O} \\ \text { (f) } & 1 & 9\end{array}$
$\times \quad 2$
(g) 26 $\times 3$
T O
(h) 18
$\times$
7
2. Multiply each number by 2 and write their product in the blank box.

3. Multiply the numbers in the below grid and write answers in the blank boxes.

| $\times$ | 5 | 6 | 7 | 8 | Ex: $-12 \times 5=60$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12 | $\rightarrow 60$ |  |  |  |  |
| 14 |  |  |  |  |  |
| 16 |  |  |  |  |  |
| 18 |  |  |  |  |  |

$\qquad$

Get your pupils to understand the instruction for each problem. Let them solve all the problems 1 to 6 by themselves.
敫
（b） 28
2
$\times \quad 2$
（c）㫛，领
解，踪
（a） 19
1
$\times \quad 5$
$\times 3$
（d） 15
$\times 6$

垙，जَ
（h） 18
$\times \quad 7$
（e） 33
（f） $\begin{array}{r}1 \\ \times \quad 2 \\ \hline\end{array}$
（g） 26

$$
\begin{array}{r}
\times \quad 3 \\
\hline
\end{array}
$$



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اي
4. Observe the first 3 numbers in each row. Write the next three numbers in the series.
(a) $2,4,6, \ldots$,
(b) $5,10,15, \longrightarrow$,
(c) $7,14,21, \ldots$,
(d) $9,18,27, \longrightarrow$

5. Identify the number that is different from the rest. Draw ' $\bigcirc$ ' around it. One example is given.

| Ex:- 3, 6, 9, 11, 15, 18 |
| :--- |
| (a) $5,10,15,21,25,30$ |
| (b) $8,16,24,32,38,48$ |
| (c) $6,12,18,24,30,32$ |
| (d) $7,14,21,25,35$ |


6. Follow the arrows and mutiply the numbers. Write the product in the blank circles.


Get the pupils to understand how to solve the problems by themselves as per the instruction.
(a) $2,4,6, \ldots$
(b) $5,10,15, \longrightarrow$
(c) $7,14,21, \longrightarrow$
(d) $9,18,27, \longrightarrow$
$\longrightarrow$


5
ل:
(a) $5,10,15,21,25,30$
(b) $8,16,24,32,38,48$
(c) $6,12,18,24,30,32$
(d) $7,14,21,25,35$

-


## 12) Division of One Number by Another Number

1. Count the number of mangoes. Say how many equal heaps are there?


The total number of mangoes in the above basket = $\square$
Here the number of mangoes in each small basket.

$\square$


How many heaps of mangoes did we get after making heaps of 5 from 20 mangoes?

When 20 mangoes were made into heaps of 5, we got 4 heaps.

It means we got 4 after dividing 20 by 5 .

We write it as $20 \div 5=4$

The symbol for division $\div$


Get your pupils to observe that there are equal number of fruits in each heap. Get them to say the number of heaps. Introduce the division and the symbol to your pupils.

 －答
2. Distribute 15 marbles equally among 5 children.


Total number of marbles


How many people distributed $=$ $\square$
How many times did we distribute equally $=$ $\square$


In the method shown above get your pupils to distribute the marbles equally. Let them write the correct numbers in the blank boxes. Introduce the Division form to your pupils.

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15 \text { گوليال }
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Exercise

1. Look at the pictures given below. Count them. Distribute equally. Write the Division form. One example is given. Fill in the blank boxes and circles.

s
Get your pupils to understand the instruction for each problem. Let them solve the problems 1 to 5 on their own.


2. Write the Division form for the following equal distribution of things.
(a) Distribute 18 mangoes among 6 people equally.

Total number of mangoes $\quad=\mathbf{1 8}$
Distribution of mangoes to 6 people for the first time
Remaining mangoes
$=-6$
$\rightarrow=12$
Distribution of mangoes to 6 people for the second time $=$
Remaining mangoes =
Distribution of mangoes to 6 people for the third time =
Result of division =

Remaining mangoes
By distributing equally each one gets

(b) Distribute 20 marbles among 5 people equally.

Total number of marbles
Marbles distributed for the first time


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Remaining marbles
Marbles distributed for the second time $=$ $\square$
Remaining marbles
Marbles distributed for the third time
Remaining marbles

$=$

avision =


$$
\begin{aligned}
& \text { 2- 2- } \\
& 18 \text { آمكو } 6 \text { اوزاو"پ. } \\
& 18= \\
& \text { ? } \\
& \frac{-6}{12}=\text { 范 } \\
& \text { 「荤 } \\
& \text { "ووّمكّ } \\
& = \\
& \text { = } \\
& =\text { アरु! } \\
& \text { = * } \\
& \div \\
& = \\
& 20 \\
& =\text { جملـوكاليا } \\
& =\quad \text { U } \\
& =\quad \text { = } \\
& \text { = ووتركم } \\
& =\quad \text { با }
\end{aligned}
$$

$$
\begin{aligned}
& \text { = با } \\
& \text { = \% \% \% } \\
& \text { = باقُ } \\
& \text {. } \\
& \ldots \square . \square=
\end{aligned}
$$

$$
\begin{aligned}
& \text { 4 } \\
& \vdots 12-3=9 \\
& 12 \div 3=4 \\
& \text {. }
\end{aligned}
$$

3. Distribute in groups. Write the Division form.

Ex. Rajani distributed 15 chocolates among her three friends. How many chocolates did she give to each friend?
Total number of chocolates $=$ 15

| The number of friend to whom |
| :--- |
| chocolates were distributed |

To each friends she distributed $=4 \div 3$
The division form

What does the result of division indicate?

(a) Three pupils can sit on a bench. How many benches are needed for 21 pupils to sit?

Total number of students


Each bench can seat


Number of benches needed


The division form $\square$
$=$

What does the result of division indicate? $\square$
(b) Ramayya has 48 sheep. He distributed them to his four sons equally. How many did each son get?


Each son got $\square$ sheep
The Division form

$$
=\square \div \square=\square
$$

The result of division shows $\square$
Get your pupils to understand the instruction for each problem. Let them solve the problems on their own.



15

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5
$15 \div 3=5=$
$\qquad$ $=$

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=
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أزراوكترّراو,
$\qquad$
$\qquad$ $\square$,




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\begin{aligned}
& \text { بابيك }
\end{aligned}
$$

$$
\begin{aligned}
& \text { = بيؤلتِكّ }
\end{aligned}
$$

$$
\begin{aligned}
& \div \square=
\end{aligned}
$$

4. Look at the table given below. Fill in the blank boxes with the correct numbers. Write the Division form for each.
Ex:-
5. Match the following divisions and their result.


Get your pupils to understand the instruction for each problem. Let them solve the problems by themselves.

4- ;

|  | طلإكزّقدار |  | تنسيم شٌ |
| :---: | :---: | :---: | :---: |
| 8 | 2 | 4 | $8 \div 2=4$ |
| 12 |  |  |  |
| 15 |  |  |  |
| 18 |  |  |  |
| 42 |  |  |  |



## (13) Length of Things

1. Look at the pictures given below. Say how garlands of flowers are being measured.


Get your pupils to observe the above pictures. Let them realise the nonstandard measure of a CUBIT. Discuss with them why different people measured the same length differently.

2. Look at the pictures.


Now answer the following questions.

1. How is the length of the table measured?
2. How is the distance between the marbles measured?
3. How is the length of garland of flowers measured?
4. How is the length of the thread measured?
5. How is the distance measured in picture 5 ?
6. How is the length of the room measured?

68
Get your pupils to observe the above pictures. Let them discuss what non standard measuring tools were used to measure length.


1. Measure and write.

| Serial <br> number | Name of the <br> pupil | Table |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Length of 4 <br> finger - widths | Length of handspan | Cubit |  |
| 1. |  |  |  |  |
| 2. |  |  |  |  |
| 3. |  |  |  |  |
| 4. |  |  |  |  |
| 5. |  |  |  |  |

2. Estimate first and then measure and say.

| Serial <br> number | Objects | Estimation of length <br> using cubit | Actual length after <br> measuring with cubit |
| :---: | :---: | :---: | :---: |
| 1. | The blackboard |  |  |
| 2. | A table |  |  |
| 3. | Length of the <br> classroom |  |  |
| 4. |  |  |  |
| 5. |  |  |  |

Get your pupils to understand the instruction for each problem. Let them solve the problems by themselves.

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## (14) Weight of things

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Look at the pictures. Narrate the story


Get your pupils to understand the concept of weight through the above story.

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1. Guess the weights of two objects shown in each box. Put a ' $\checkmark$ ' near the heavier object.

2. Guess the weights of two objects given together. Put a ' $\checkmark$ 'near the lighter object.


Get your pupils to understand the instruction for each problem. Let them solve the exercises 1 to 4 by themselves.

3. Write numbers 1 to $\mathbf{4}$ for each object in the order of their increasing weight.

4. Mark the heavier of the two girls with a ' $\checkmark$ ',


64 Get your pupils to understand the instruction for each question. Let


2
1
1

(a)
$\square$

(b)

?


## (15) Measure of Liquids

1. Look at the pictures given below. Say which vessels are used to measure milk.
Ravi, Raju and Rama receive 2 litres of milk from three different people every day.


At Raju's house, milkmaid Vanajamma pours 2 mugful of milk.


At Rama's house milkman Hussain pours 8 small glassful of milk


The three children got a doubt on the milk supplied to each of them.

Who is supplying the correct quantity of milk

Get your pupils to observe the above pictures. Let them discuss what non standard measurements like glasses, mugs etc., to measure milk.

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2. Play this game.


- Two children can play this game.
- Take a big bucket full of water. Take a small bucket, a jug and a mug also.
- First, one pupil takes the jug and pours water from the big bucket into the small one.
- Then the second pupil also pours water with the mug into the small bucket.
- The pupils pour water alternatingly.
- Continue this till the small bucket is full.
- The pupil who fills the small bucket with jug or mug completely is the winner.

Get your pupils to play the game as per the instructions. Let them estimate the measuring vessels to fill the bucket. Help them to discuss.

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\end{aligned}
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1. Draw in the box a vessel which holds less water than the vessel shown below.

$\square$
2. Draw in the box a vessel which holds more water than the quality shown below.

3. Give rankings to the following vessels according to the quantity of water each can hold.


Get your pupils to understand the instructions for each problem. Let them solve the problems by themselves. 1


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4. Say how much water does each vessel hold. Find out by actual measuring.

of water can be poured? Estimate. Then measure and find out.

how many

of water can be poured? Estimate. Then measure
and find out.

of water can be poured? Estimate. Then measure
and find out.
Based on the above activity, fill in the table given below.
Say who has estimated correctly.

| Serial <br> Number | Names of your <br> friend who did the <br> above activity | Estimated <br> measures | Actual <br> measurement <br> made | Estimation was <br> correct / wrong |
| :---: | :---: | :---: | :---: | :---: |
| 1. |  |  |  |  |
| 2. |  |  |  |  |
| 3. |  |  |  |  |
| 4. |  |  |  |  |

Get your pupils to understand the instructions for each of the above problems. Let them solve the problems by themselves.

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## (16) Time

1. Look at the pictures. Say what things you do at what time.


- Say what activities do you do in the morning.
- Say what activities do you do in the afternoon.
- Say what activities do you do in the evening.

Get your pupils to observe the above pictures. Let them discuss what they do every day from morning to night. Help them to understand the concept of time.


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\end{aligned}
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2. Look at the names of days in a week shown below.


Now answer the following questions.
(a) What is the day after Sunday? $\square$
(b) What is the day between Monday and Wednesday? $\square$
(c) What is the day after Saturday?

(d) After how many days does Friday comes after Sunday?
(e) How many days are there from Monday to Sunday?
(f) How many days are there in a week?
$\square$
$\square$
$\square$

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الو゙ا (a
$\square$ (b

(C



(e
$\square$

3. Look at the months in the picture. Answer the following.


Now answer the following questions.
(a) Which month comes after January? $\square$
(b) Which is the month between April and June? $\square$
(c) Which month comes after July?
(d) After how many months does December come after September? $\square$
(e) How many months are there ?


Get your pupils to observe the above picture. Let them discuss the number of days in a week.
-

$\square$

(b) (b)
$\square$ (c)
$\square$
 (e)

$\qquad$

1. On a holiday on which activity do you spend more time? Mark those activities with a $\sqrt{ }$.

2. Order the following activities according to what time you do them.

3. Which activity takes more time? Mark ' $\sqrt{ }$ ' to the one which takes more time.

4. Put ' $\sqrt{ }$ ' for the one which goes faster.


Get your pupils to understand the instruction for each problem. Let them solve problems by themselves.


1. Look at the currency notes and coins. Identify each one. Say how much each one is.


Get your pupils to observe the notes and coins. Let them identify them. Let them say how much is each of them.


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2. Look at the coins shown below. Say in how many other ways we can give change.


Get your pupils to observe the above coins. Let them discuss in how many ways we can give change for coins of bigger value.

3. Look at the coins and notes shown below. Say in how many other ways we can give change.


Get your pupils to observe the above notes and coins. Let them discuss in how many ways we can give change for notes of bigger value.

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Exercise

1. Look at the coins in each row. Add their value and write in the box.
(a)
 $+$

$=$ Rs. $\square$
(b)


$$
=\mathrm{Rs}
$$

$\square$
(c)


$$
=\mathrm{Rs}
$$

$\square$
(d)


$$
=\text { Rs. }
$$


2. Look at the price of each item. Write in circles the value of coins equal to the price of the item. Look at the example.

Example:


Rs. 6
(a)

(b)


Rs. 9
(c)


Get your pupils to understand the instruction for each problem. Let them solve the problems by themselves.
a)

b)

$=$

رو
c)

$\square$ $\stackrel{\wedge}{40}$
d)



2-

(a)

(b)
(c)
c)

-

## (18) Shapes

1. Look at the picture.


Now answer the following questions orally.
a) Is the flag and the blackboard in same shape?

b) Identify the things which are of this shape (inside and outside your class room).

Get your pupils to observe the above picture. Let them discuss the shapes of things.
(18)

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Exercise

1. Match the figures which have the same shape. Look at the example.

2. Match the things on the left with their similar shapes on the right.


Get your pupils to understand the instruction for each problem. Let them solve the problems 1 to 7 by themselves.


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3. Look at the three things in each row. Mark the one with a different shape ' $\checkmark$ ', in the blank box.

4. Look at the shapes. Count them and write.
(a)

how many $\qquad$ are there? $\qquad$
(b)

In this picture

$\square$ are there? $\qquad$

Get your pupils to understand the instruction for each problem. Let them solve the problems by themselves.

5. Observe the first three figures in each row. Write the next figure.

(a)

(b)

(c)

6. Join the dots to draw different shapes. One is done for you.


Get your pupils to understand the instruction for each problem. Let them solve the problems by themselves.

| $\square$ | $\square \square$ | $\square \square$ | $\square \square$ |
| :---: | :---: | :---: | :---: |
| $\bigcirc$ | $\bigcirc \bigcirc$ | $0 \bigcirc$ |  |
| (a) |  |  |  |
| $\Delta \Delta$ | $\Delta$ | $\Delta \Delta$ |  |
| $\Delta \Delta$ | (b) |  |  |
| $\Delta \Delta$ | $\Delta \Delta$ | $\diamond$ |  |

6

7. Observe the diagram given below. Colour the same shaped parts with the same colour. Count the parts which have the same shape.


Write the number of parts which have the following shapes.


Get your pupils to understand the instruction. Let them solve the above problems by themselves.




## (19) Let Us Record

1. Look at the colours of flowers.


Write in the following table. How many flowers of each colour are there.

| Colour of the flower | Number of flowers |
| :---: | :---: |
| Red | 9 |
| Yellow |  |
| White |  |

Get your pupils observe the colours of the flowers. Let them count the flowers of each colour. Ask them to record the correct number in the table.

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2. Look at the pictures in the table given below.


Count each type of fruit. Record the number in the table.


Get your pupils observe the above table of fruits. Let them count each type of fruit. Ask them to record the number in the table.




3. The details of cows, goats and hens that Ramayya has given in the form of pictures. Count them.


Now record the numbers in the table given below.
Ramayya has the following in his farm.

| Animal | Their number |
| :---: | :---: |
|  |  |
|  |  |
|  |  |

Get your pupils to observe the pictures. Let them count the animals and record the number in the table.

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\begin{aligned}
& \text { - اعدر } \\
& \text { ק ק }
\end{aligned}
$$


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Exercise
Look at the picture. Count each item. Enter the details in the following table.


Ex:- | Items | Their number |
| :---: | :---: |
| Cows | 5 |
|  |  |
|  |  |
|  |  |
|  |  |

Get your pupils to understand the instruction given for the problem. Let them solve the problem by themselves.



$\qquad$ 2022－23－个众

| Table of 1 | Table of 2 | Table of 3 |
| :---: | :---: | :---: |
| $1 \times 1=1$ | $2 \times 1=2$ | $3 \times 1=3$ |
| $1 \times 2=2$ | $2 \times 2=4$ | $3 \times 2=6$ |
| $1 \times 3=3$ | $2 \times 3=6$ | $3 \times 3=9$ |
| $1 \times 4=4$ | $2 \times 5=10$ | $3 \times 4=12$ |
| $1 \times 5=5$ | $2 \times 6=12$ | $3 \times 6=18$ |
| $1 \times 6=6$ | $2 \times 8=16$ | $3 \times 7=21$ |
| $1 \times 7=7$ | $2 \times 9=18$ | $3 \times 8=24$ |
| $1 \times 8=8$ | $2 \times 10=20$ | $3 \times 10=30$ |
| $1 \times 9=9$ | $2 \times 14$ | $3 \times 5$ |
| $1 \times 10=10$ | 2 | 3 |


| Table of 4 | Table of 5 | Table of 6 |
| :---: | :---: | :---: |
| $4 \times 1=4$ | $5 \times 1=5$ | $6 \times 1=6$ |
| $4 \times 2=8$ | $5 \times 2=10$ | $6 \times 2=12$ |
| $4 \times 3=12$ | $5 \times 3=15$ | $6 \times 3=18$ |
| $4 \times 4=16$ | $5 \times 4=20$ | $6 \times 4=24$ |
| $4 \times 5=20$ | $5 \times 5=25$ | $6 \times 5=30$ |
| $4 \times 6=24$ | $5 \times 6=30$ | $6 \times 7=42$ |
| $4 \times 7=28$ | $5 \times 7=35$ | $6 \times 8=48$ |
| $4 \times 8=32$ | $5 \times 9=40$ | $6 \times 10=60$ |
| $4 \times 9=36$ | $5 \times 10=50$ | 695 |
| $4 \times 10=40$ | $5 \times 50$ |  |


| Table of 7 | Table of 8 | Table of 9 |
| :---: | :---: | :---: |
| $7 \times 1=7$ | $8 \times 1=8$ | $9 \times 1=9$ |
| $7 \times 2=14$ | $8 \times 2=16$ | $9 \times 2=18$ |
| $7 \times 3=21$ | $8 \times 3=24$ | $9 \times 3=27$ |
| $7 \times 4=28$ | $8 \times 4=32$ | $9 \times 4=36$ |
| $7 \times 5=35$ | $8 \times 5=40$ | $9 \times 5=45$ |
| $7 \times 6=42$ | $8 \times 7=56$ | $9 \times 7=63$ |
| $7 \times 7=49$ | $8 \times 8=64$ | $9 \times 9=81$ |
| $7 \times 8=56$ | $8 \times 10=80$ | $9 \times 10=90$ |
| $7 \times 9=63$ | $8 \times 72$ | 9 |
| 7 |  |  |


| Table of 10 | Table of 11 | Table of 12 |
| :---: | :---: | :---: |
| $10 \times 1=10$ | $11 \times 1=11$ | $12 \times 1=12$ |
| $10 \times 2=20$ | $11 \times 2=22$ | $12 \times 2=24$ |
| $10 \times 3=30$ | $11 \times 3=33$ | $12 \times 3=36$ |
| $10 \times 4=40$ | $11 \times 4=44$ | $12 \times 4=48$ |
| $10 \times 5=50$ | $11 \times 5=55$ | $12 \times 5=60$ |
| $10 \times 6=60$ | $11 \times 6=66$ | $12 \times 6=71$ |
| $10 \times 7=70$ | $11 \times 7=77$ | $12 \times 7=84$ |
| $10 \times 8=80$ | $11 \times 9=99$ | $12 \times 9=108$ |
| $10 \times 9=90$ | $11 \times 10=110$ | $12 \times 10=120$ |
| $10 \times 10=100$ |  |  |

## LEARNING OUTCOMES

## The learner....

## Extends patterns using different objects, shapes and numbers



Solves simple daily life/situation problems/ based on addition and subtraction of two digit numbers with and without regrouping

MAITHEMATICS

## CLASS 2

Reads and writes numbers up to 99 using groups of tens and ones

Estimates and verifies by measuring length/ distances, weight and capacities using non-standard units

Describes basic 3D and 2D shapes with their observable characteristics.

Collects data, represents it in a table and draws inferences

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