GOVERNMENT OF TAMIL NADU

STANDARD THREE

TERM - II

VOLUME 2

MATHEMATICS
SCIENCE
SOCIAL SCIENCE

A publication under Free Textbook Programme of Government of Tamil Nadu

Department Of School Education

Untouchability is Inhuman and a Crime

Government of Tamil Nadu

First Edition - 2019

(Published under New Syllabus in Trimester Pattern)

NOT FOR SALE

Content Creation

State Council of Educational Research and Training

Printing & Publishing

Tamil NaduTextbook and Educational Services Corporation

www.textbooksonline.tn.nic.in

MATHEMATICS

CONTENTS

MATHEMATICS

J2U1U7
E-book

K1A8J9
Assessment

B318_3_MATHS_EM
DIGI Links

Let's use the QR code in the text books!
Download DIKSHA app from the Google Play Store.
Tap the QR code icon to scan QR codes in the textbook.
Point the device and focus on the QR code.
On successful scan, content linked to the QR code gets listed.

Note: For ICT corner, Digi Links QR codes use any other QR scanner.

UNIT-1

NUMBERS

K8R8A4

Mutiplication

Mutiplication is adding the same number to a specified number of times.

Example: 4 + 4 + 4 = 12

Here, we add 4 three times and the answer is 12.

This can be written as 4 × 3 = 12.

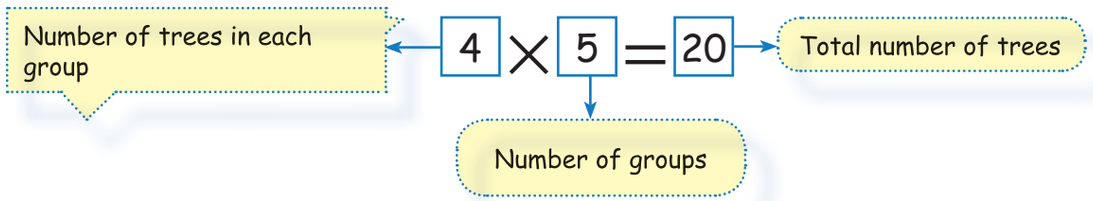
Multiplication is quicker way to add the number occuring repeatedly.

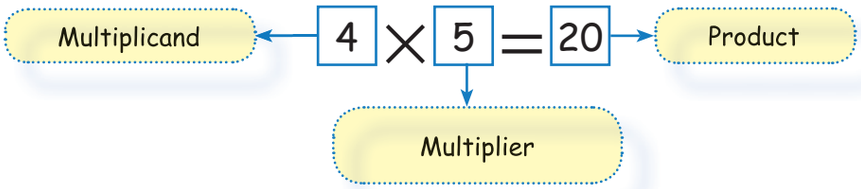
1.1 Symbol of multiplication

we use the symbol "x " to represent multiplication.

4 Trees in 5 groups is 20

This can be written as 4 x 5 = 20





Mutiplication of a number with other number can be done in the following ways.

(i) Dot multiplication (ii) Repeated addition (iii) Regrouping

(iv) Standard multiplication algorithm (v) Lattice multiplication

1.2 Dot multiplication:

Complete the following table.

Stars	Number of horizontal rows	number of vertical columns	Total number of stars
	2	4	2 x 4 = 8
			
			
			

1.3 Repeated addition:

Let us recall the repeated addition we have learnt in lower classes.

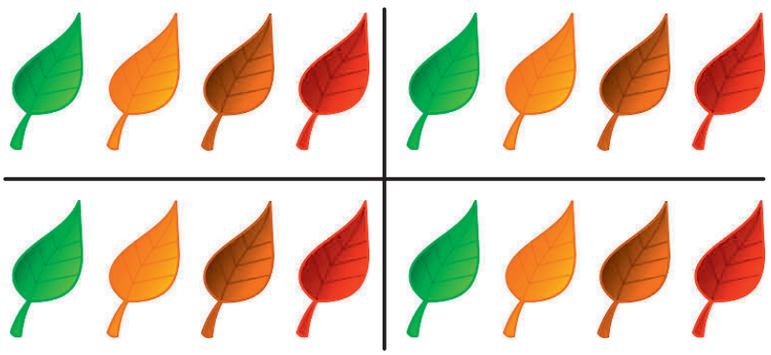
i) Find the total number of flowers.

We can find the total number of flowers as follows.

3 + 3 + 3 = 9

3 groups of 3 flowers make 9 | 3 × 3 = 9

ii) Find the total number of leaves.



4 + 4 + 4 + 4 = | | 4 × 4 = 16

iii) How many apples are there in four plates

There are four plates. Each has five apples.

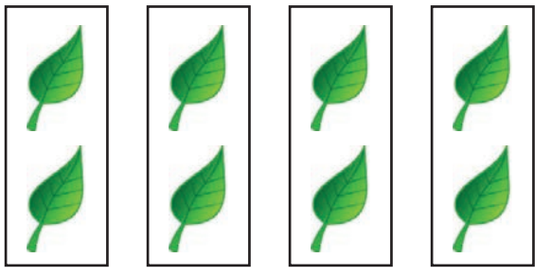
Total number of apples = 5 + 5 + 5 + 5 =

1.4 Construction of multiplication tables of 2, 3, 4, 5, & 10

Multiplication table 2

Each box has 2 balls	Repeated addition facts	Multiplication facts
	2	$2 \times 1 = \mathbf{2}$
	$2 + 2$	$2 \times 2 = \mathbf{4}$
	$2 + 2 + 2$	$2 \times 3 = \mathbf{6}$
	$2 + 2 + 2 + 2$	$2 \times 4 = \mathbf{8}$
	$2 + 2 + 2 + 2 + 2$	$2 \times 5 = \mathbf{10}$
	$2 + 2 + 2 + 2 + 2 + 2$	$2 \times 6 = \mathbf{12}$
	$2 + 2 + 2 + 2 + 2 + 2 + 2$	$2 \times 7 = \mathbf{14}$
	$2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$	$2 \times 8 = \mathbf{16}$
	$2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$	$2 \times 9 = \mathbf{18}$
	$2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$	$2 \times 10 = \mathbf{20}$

Multiplying by 2:



$2 + 2 + 2 + 2 = 8$

2 leaves in 4 groups is 8. This can be written as $2 \times 4 = 8$

4 times 2 is 8

Multiplier

Multiplicand ← 2 × 4 = 8 → Product

Activity:

x	1	2	3	4	5	6	7	8	9	10
2	2	4			10				18	

Exercise

Fill in the boxes:

2 x 6 =		7 x 2 =		8 x 2 =	
9 x 2 =		2 x 5 =		4 x 2 =	
3 x 2 =		2 x 2 =		2 x 3 =	

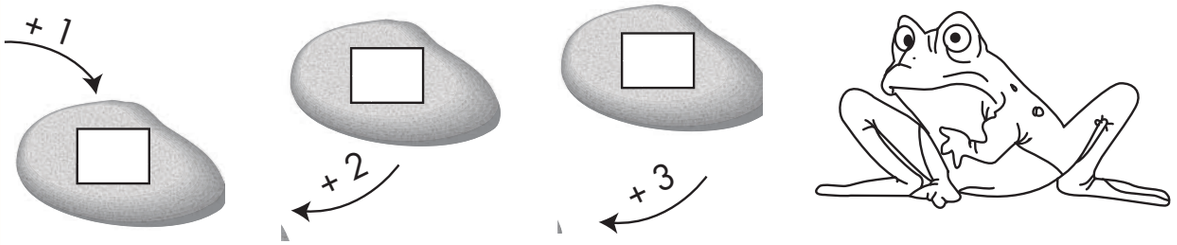
Multiplication table 3

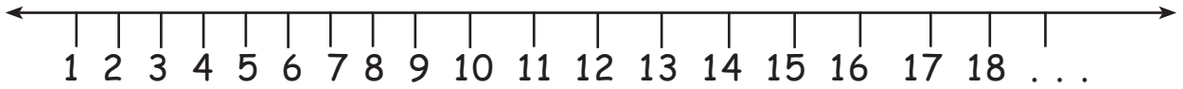
Boxes of 3 stars	Repeated addition facts	Multiplication facts
***	3	$3 \times 1 = 3$
*** ***	$3 + 3$	$3 \times 2 = 6$
*** *** ***	$3 + 3 + 3$	$3 \times 3 = 9$
*** *** *** ***	$3 + 3 + 3 + 3$	$3 \times 4 = 12$
*** *** *** *** ***	$3 + 3 + 3 + 3 + 3$	$3 \times 5 = 15$
*** *** *** *** *** ***	$3 + 3 + 3 + 3 + 3 + 3$	$3 \times 6 = 18$
*** *** *** *** *** *** ***	$3 + 3 + 3 + 3 + 3 + 3 + 3$	$3 \times 7 = 21$
*** *** *** *** *** *** *** ***	$3 + 3 + 3 + 3 + 3 + 3 + 3 + 3$	$3 \times 8 = 24$
*** *** *** *** *** *** *** *** ***	$3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3$	$3 \times 9 = 27$
*** *** *** *** *** *** *** *** *** ***	$3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3$	$3 \times 10 = 30$

Activity:

Shall we say the multiples of 3.

I like to jump by 3





Multiples of 3 = 3, 6, 9, 12, 15, 18

Exercise

1. Fill in the following tables:

x	1	2	3	4	5	6	7	8	9	10
2	2		6				14			
3	3				15					30

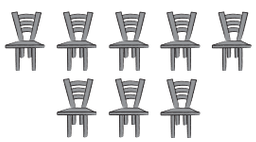
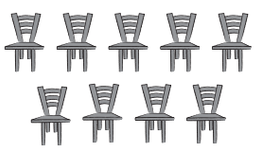
2. Fill in the boxes:

6 × 3 = ☐ 5 × 3 = ☐ 3 × 3 = ☐ ☐ × 3 = 9

10 × 3 = ☐ 3 × 6 = ☐ 8 × 3 = ☐ 2 × ☐ = 6

4 × 3 = ☐ 3 × 10 = ☐ 3 × 4 = ☐ 9 × ☐ = 27

Multiplication table 4

A chair has 4 legs	Repeated addition facts	Multiplication facts
	4	4 × 1 = **4**
	4 + 4	4 × 2 = **8**
	4 + 4 + 4	4 × 3 = **12**
	4 + 4 + 4 + 4	4 × 4 = **16**
	4 + 4 + 4 + 4 + 4	4 × 5 = **20**
	4 + 4 + 4 + 4 + 4 + 4	4 × 6 = **24**
	4 + 4 + 4 + 4 + 4 + 4 + 4	4 × 7 = **28**
	4 + 4 + 4 + 4 + 4 + 4 + 4 + 4	4 × 8 = **32**
	4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4	4 × 9 = **36**
	4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4	4 × 10 = **40**

Exercise

1. Complete the table.

×	1	2	3	4	5	6	7	8	9	10
4				16			28		36	

2.

If there are 4 toys in a box, how many toys will be there in 5 boxes?

□ × □ = □

3. Fill in the boxes.

3 × □ = 12

5 × 4 = □

□ × 4 = 28

9 × 4 = □

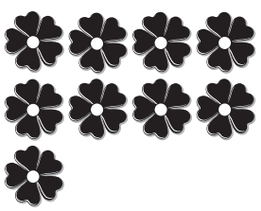
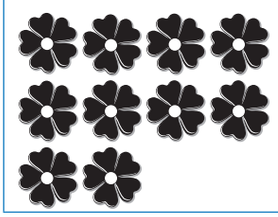
6 × □ = 24

□ × 3 = 12

4 × □ = 16

□ × 4 = 40

Multiplication table 5

A flower has 5 petals	Repeated addition facts	Multiplication facts
	5	5 × 1 = 5
	5 + 5	5 × 2 = 10
	5 + 5 + 5	5 × 3 = 15
	5 + 5 + 5 + 5	5 × 4 = 20
	5 + 5 + 5 + 5 + 5	5 × 5 = 25
	5 + 5 + 5 + 5 + 5 + 5	5 × 6 = 30
	5 + 5 + 5 + 5 + 5 + 5 + 5	5 × 7 = 35
	5 + 5 + 5 + 5 + 5 + 5 + 5 + 5	5 × 8 = 40
	5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5	5 × 9 = 45
	5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5	5 × 10 = 50

Exercise

1. Fill in the blanks:

- - - - - - - - - - - - × 5 = 10

4 × - - - - - - - - - - - - - = 20

6 × 5 = - - - - - - - - - - - -

9 × - - - - - - - - - - - - - = 45

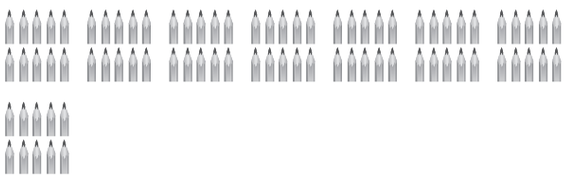
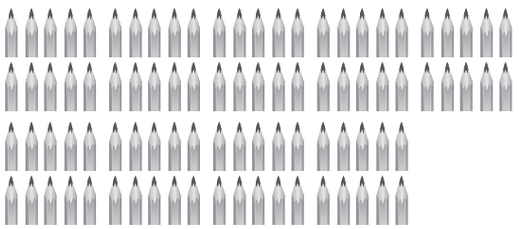
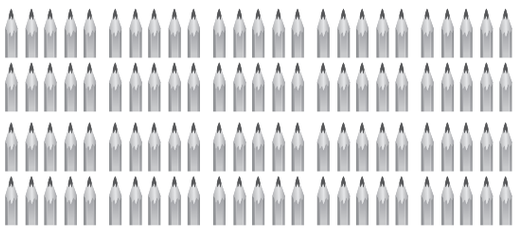
- - - - - - - - - - - - - × 5 = 50

2.

If there are 6 roses in a vase, how many roses will be there in 6 vases?

□ × □ = □

Multiplication table 10

10 pencils in one box	Repeated addition facts	Multiplication facts
	10	10 × 1 = **10**
	10 + 10	10 × 2 = **20**
	10 + 10 + 10	10 × 3 = **30**
	10 + 10 + 10 + 10	10 × 4 = **40**
	10 + 10 + 10 + 10 + 10	10 × 5 = **50**
	10 + 10 + 10 + 10 + 10 + 10	10 × 6 = **60**
	10 + 10 + 10 + 10 + 10 + 10 + 10	10 × 7 = **70**
	10 + 10 + 10 + 10 + 10 + 10 + 10 + 10	10 × 8 = **80**
	10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10	10 × 9 = **90**
	10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10	10 × 10 = **100**

Exercise

Complete the following table:

x	1	2	3	4	5	6	7	8	9	10
5										
10										

1.5 Multiplication by regrouping:

This method can be used by multiplying a two digit number.

Consider the following multiplication

53×7

53 can be regroup into 5 tens and 3 ones.

Hence, 53×7 can be written as $(50 + 3) \times 7$

$= (50 \times 7) + (3 \times 7)$

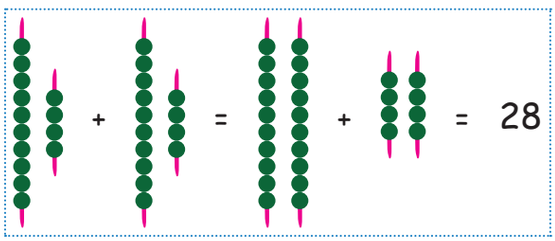
$= 350 + 21$

$= 371.$

Example

14×2 = ?

That is 2 Times 14



$14 \times 2 =$ (2 × 1 Ten) + (2 × 4 Ones)

$=$ (2 × 10) + (2 × 4) $= 20 + 8$

$14 \times 2 = 28$

Exercise

1. Multiply the following numbers by regrouping

(i) 75×8 (ii) 26×5 (iii) 372×6 (iv) 402×7 (v) 752×3

1.6 Multiplication using standard algorithm:

Multiply using multiplication table

Step 1: **Multiply Ones**

T	O
1	4
×	2
	8

4 × 2 = 8

Step 2: **Multiply Tens**

T	O
1	4
×	2
2	8

1 × 2 = 2

Product = 14 × 2 = 28

P2P9H3

Example

1. Multiply. 23×4

Step 1:

H	T	O
	1	
	2	3
	×	4
		2

3 × 4 = 12

Step 2

H	T	O
	1	
	2	3
	×	4
	9	2

2 × 4 = 8

Product = 23 × 4 = 92

2. Multiply. 32×5

Step 1:

H	T	O
	1	
	3	2
	×	5
		0

$2 \times 5 = 10$

Step 2:

H	T	O
	1	
	3	2
	×	5
1	6	0

$3 \times 5 = 15$

Product = 32 × 5 = 160

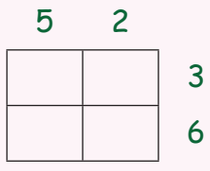
1.7 Lattice multiplication:

Lattice multiplication is helpful while dealing with numbers with more than two digits. We follow the following steps in Lattice multiplication.

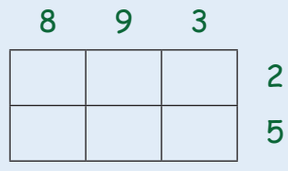
L3J2B4

Step 1: Write the numbers to be mutiplied as follows.

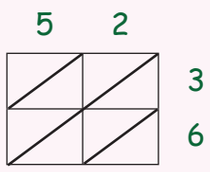
(i) 52 × 36

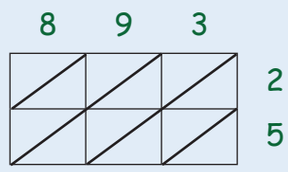


(ii) 893 × 25

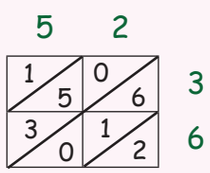


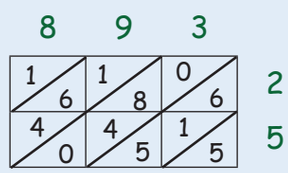
Step 2: Draw diagonals of the square.



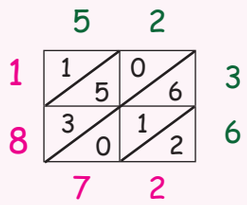


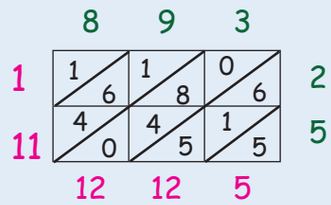
Step 3: Mulitiply the numbers and write them in the cells as shown below



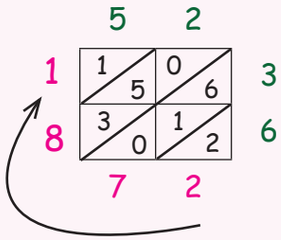


Step 4: Find the sum of each diagonal and write as follows.

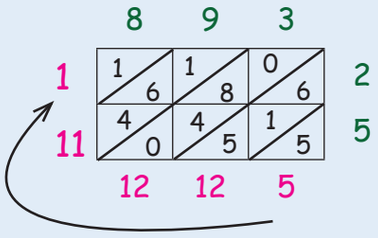




Step 5: **Arrange the sum to get answer as follows.**



Answer: 1 8 7 2



Answer: (1 +1) (1 + 1) (2 + 1) 2 + 5
2 2 3 2 5

Exercise

1. Find the product using standard algorithm:

i) $20 \times 2 =$ ☐ ii) $21 \times 4 =$ ☐ iii) $65 \times 5 =$ ☐

iv) $14 \times 3 =$ ☐ v) $26 \times 10 =$ ☐

I5Y5F1

2. Complete the following table

i) If the cost of one pen is ₹ 5, what will be the cost of 8 pens?	$8 \times 5 = 40$
ii) If there are 7 balls in a bag, how many balls will be there in 4 bags?	$4 \times 7 =$ ___
iii) If the cost of one book is ₹ 10, what will be the cost of 7 books?	___ $\times 10 =$ ___
iv) If there are 6 button in a shirt, how many buttons will be there in 3 shirts?	___ $\times$ ___ =

3. Find the product of the following numbers using lattice multiplication

i) 22×25 ii) 34×51 iii) 45×24

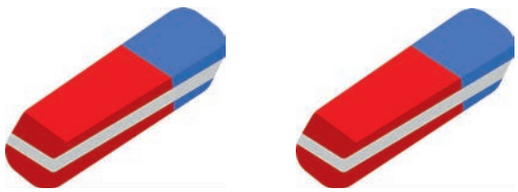
1.8 Number operations in daily life situations

$= (2+2+2) = 2 \times 3 = 6$ balls

$= (1+1+1) = 1 \times 3 = 3$ balls

Example 1

If the cost of one eraser is ₹ 4, what will be the cost of 2 erasers?



$4 + 4 = 8$

$2 \times 4 = 8$

The cost of two erasers = $2 \times 4 = 8$

Example 2

If there are 6 eggs in a box, how many eggs will be there in 5 boxes.

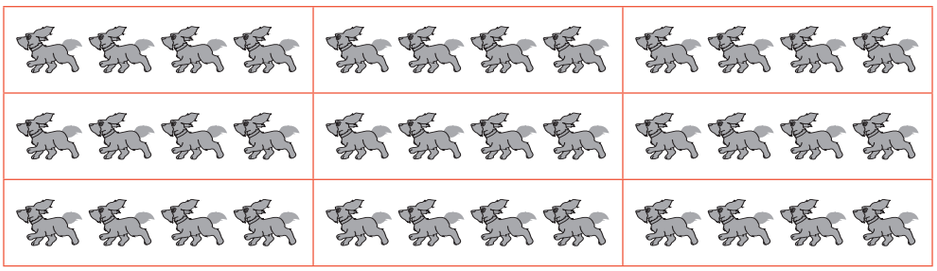
Number of Boxes = 5

Number of Eggs = 6

Total Number of Eggs = $5 \times 6 = 30$

Exercise

1. If there are 4 toys in a box. How many toys will be there in 9 boxes?



Number of Boxes =

Number of toys in each box =

Total Number of toys =

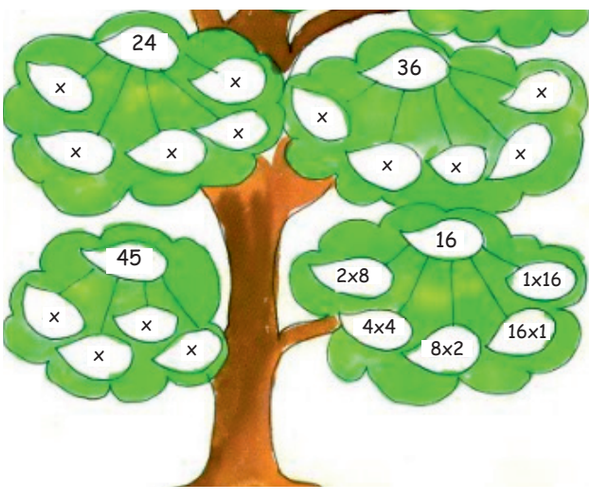
2. If there are 3 colour pencils in a packet. How many colour pencils will be there in 9 packets?

Number of packets =

Number of colour pencils in each packets =

Total Number of colour pencils =

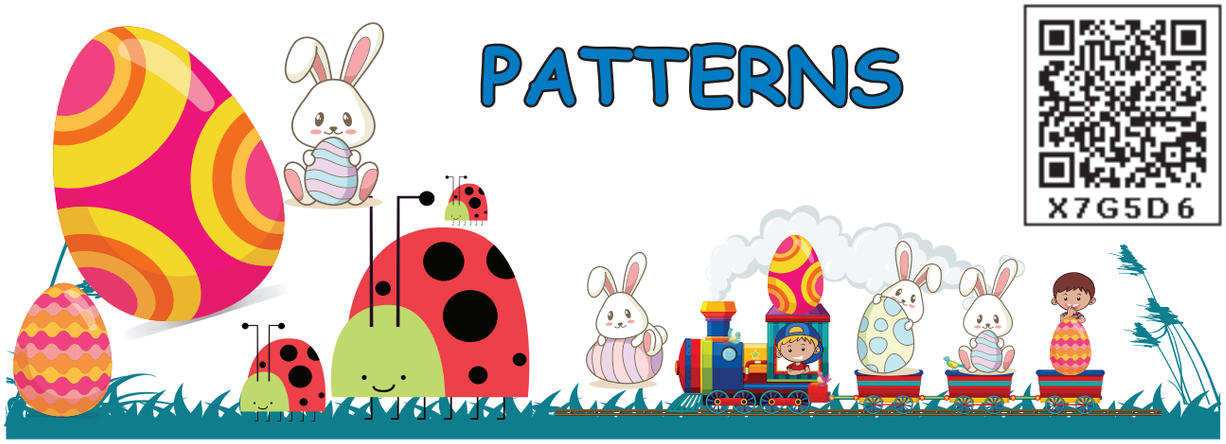
3. Write the multiplication fact for the following products



UNIT-2

PATTERNS

X7G5D6



Pattern in Numbers

We have learnt about some patterns in shapes.

Let us learn about patterns in numbers.

2.1 Patterns in numbers for odd and even numbers and in adding odd and even numbers.

Recall

Circle the odd numbers in the given sequence.

i) 26, 29, 37, 42, 45.

ii) 85, 84, 75, 76, 65, 64.

iii) 11, 22, 33, 44, 55, 66.

iv) 357, 896, 572, 951, 865, 423.

v) 952, 698, 342, 780, 920, 850.

Complete the table from the above numbers.

Odd numbers	Even numbers

Observe the number chart given below. Colour the odd numbers with green and even numbers with blue.

201	202	203	204	205	206	207	208	209	210
211	212	213	214	215	216	217	218	219	220
221	222	223	224	225	226	227	228	229	230
231	232	233	234	235	236	237	238	239	240
241	242	243	244	245	246	247	248	249	250
251	252	253	254	255	256	257	258	259	260
261	262	263	264	265	266	267	268	269	270
271	272	273	274	275	276	277	278	279	280
281	282	283	284	285	286	287	288	289	290
291	292	293	294	295	296	297	298	299	300

We observe that odd and even numbers occur alternatively.

Complete the patterns :

i) 21, 22, 23, ____, ____, ____, ____, ____.

ii) 1, 3, 5 ____, ____, ____, ____, ____.

iii) 2, 4, 6 ____, ____, ____, ____, ____.

iv) 85, 86, 87, 88, ____, ____, ____, ____, ____,.

v) 39, 41, 43, ____, ____, ____, ____, ____,.

Let's explore patterns while adding and subtracting odd and even numbers.

Add the following numbers:

i)

2 2	even
+3 2	even
____	even

ii)

7 3	
+8 5	
____	

iii)

7 5 5	
+2 8 6	
____	

iv)
$$\begin{array}{r} 853 \\ +325 \\ \hline \end{array}$$

v)
$$\begin{array}{r} 978 \\ +876 \\ \hline \end{array}$$

vi)
$$\begin{array}{r} 252 \\ +553 \\ \hline \end{array}$$

Thus, we observe that addition of odd and even numbers involve a pattern.

Lets tabulate the patterns observed.

i)	Odd number	+	Odd number	=	Odd number
ii)		+		=	Even number
iii)	Odd number	+		=	Odd number
iv)	Even number	+		=	Odd number

Subtract the following numbers:

i)
$$\begin{array}{r} 756 \\ -252 \\ \hline \end{array}$$

ii)
$$\begin{array}{r} 895 \\ -253 \\ \hline \end{array}$$

iii)
$$\begin{array}{r} 497 \\ -432 \\ \hline \end{array}$$

iv)
$$\begin{array}{r} 576 \\ -223 \\ \hline \end{array}$$

v)
$$\begin{array}{r} 235 \\ +521 \\ \hline \end{array}$$

vi)
$$\begin{array}{r} 782 \\ +141 \\ \hline \end{array}$$

Let's tabulate the patterns observed.

i)	Odd number	-	Odd number	=	Odd number
ii)		-		=	Even number
iii)	Odd number	-		=	Odd number
iv)	Even number	-		=	Odd number

2.2 Patterns using 10 in multiplication and division

Example:

i) 10,20,30,40,50 ii) 1,10,100,1000

iii) 2000,200,20,2 iv) 5000,500,50,5

Exercise

1. Make the patterns by multiplying with 10

i) 1,3,5,7, ---, ---, ---, ---

ii) 2,4,6,8, ---, ---, ---, ---

iii) 1,3,7,13, ---, ---, ---, ---

iv) 3,5,9,15, ---, ---, ---, ---

U9V8H3

2. Make the patterns by dividing with 10

i) 110,120,130 ---, ---, ---, ---

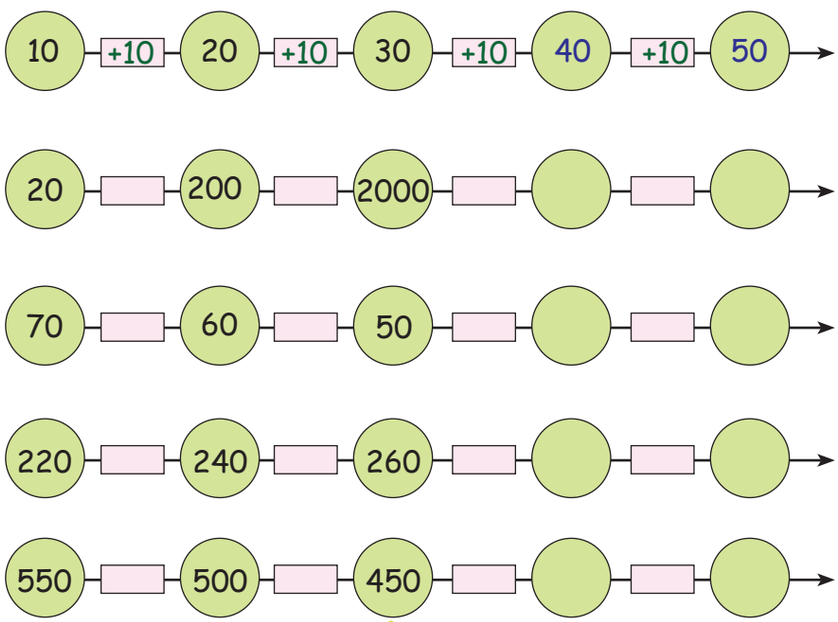
ii) 210,230,250 ---, ---, ---, ---

iii) 470,430,410 ---, ---, ---, ---

iv) 540,470,350 ---, ---, ---, ---

v) 500,510,520 ---, ---, ---, ---

3. Find the rule and complete the folllowing pattern.



UNIT-3

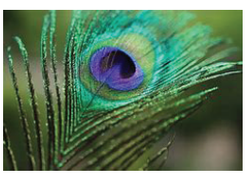
MEASUREMENTS

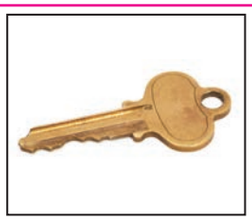
Y3T9P2

Measurement of Weight

Recall

Tick the heavier object

i. 

ii. 

iii. 

iv. 

3.1 Weighing objects using non standard units

Activity 1

Place your geometry box in one pan of the simple balance and weigh it using the following in the other pan (i) Tamarind seeds, (ii) Stones/ Pebbles and (iii) Eraser. Tabulate the weight found.

Objects	Non standard units
Geometry box	_____ Tamarind seeds
Geometry box	_____ Stones/Pebbles
Geometry box	_____ Erasers

Place a tiffin box instead of geometry box. You can try this activity with other objects also.

Objects	Non standard units
Tiffin box	_____ Tamarind seeds
Tiffin box	_____ Stones/Pebbles
Tiffin box	_____ Erasers

Weight of the object measured using tamarind seeds, stones/pebbles and erasers differ as they are not standard. Hence, we use standard weighing object called weighing stones.

3.2 Conversion of weight in gram and kilogram.

We use standard units such as milligrams, grams and kilograms to measure weight.

Heavier things are measured in **kilograms**. It can be shortly written as **kg**

Lighter things are measured in **grams**. It can be shortly written as **g**

1 kilogram = 1000 gram

1 gram = 1000 milligram

Do You Know

$\frac{1}{2}$ kg = 500 grams

$\frac{1}{4}$ kg = 250 grams

$\frac{3}{4}$ kg = 750 grams

Conversion of weight

= 

1kg = 10 packets of 100g

= 1000g

V4N2I3

= 

2kg = 20 packets of 100g

= 2000g

Find the number of 100g packets used to fill 3kg of rice.

Exercise

1. Circle the odd one out.

i) gram kilogram metre

ii) 50g 500g 100cm

iii) 1 m 2 kg 5 kg

V6R4W9

2. Fill in the blanks

i) 1000 grams = _____ kg

ii) 2 kilograms = _____ grams

3. Write in short form:

i) gram = _____

ii) kilogram = _____

4. Find the number of bags to be used to fill the given items, if one bag can hold 100 g of the given items.

Items	Quantity bought	weight in grams	number of bags
Pepper powder	1 kg		
Coriander powder	2 kg		
Coffee powder	5 kg		
Dhal	10 kg		
Mustard	2 kg		
Cashew nut	500 g		

5. Answer the following:

i) Price of 100g of icecream is ₹ 20. Ramya bought 1Kg of ice cream. How much should she pay to the shopkeeper.

ii) Price of 1 Kg of sugar is ₹ 50. Ranjith bought 2000g of sugar.Find the amount she has to pay to the shopkeeper.

iii) Saranya had 3 Kg of flour to be packed into packets of 500g each. In how many packets can she pack the flour?

UNIT-4

TIME

4.1 Reading time correct to the hour

In the class room

Children : Good Morning Teacher.

Teacher : Good Morning Children. Ramya, When do you come to school?

Ramya : By 8 O'Clock teacher.

Teacher : How do you know the time?

Ramya : My mother tells me the time by looking at the clock, teacher.

Teacher : Do you know to find the time by looking at the clock?

Ramya : No Teacher.

Teacher : Children, Today we shall learn to find the time by looking at the clock

Observe the face of the clock.

The face of the clock is marked with numerals (1 to 12).

The clock has two hands. One hand is longer and another is shorter.

The longer hand is the minute hand. it shows time in minutes.

The shorter hand is the hour hand. It shows time in hours.

When the minute hand is at 12, the hour hand tells the hour of the day.

5'O clock

The short hand of the clock is at 5.

The long hand of the clock is at 12

So the time is 5'O clock.

We write it as 5:00.

After 1 hour

6'O clock

The short hand of the clock is at 6.

The long hand of the clock is at 12.

So the time is 6'O clock

We write it as 6:00

M6F9U6

Activity 1

Look at the position of the hour hand and write the time in the given box.

Activity 2

Draw the hands in the following clocks to show the given time.

11'o clock

1'o clock

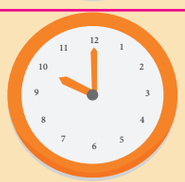
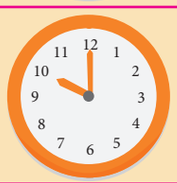
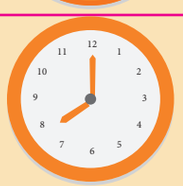
5'o clock

7'o clock

6'o clock

Activity 3

Tick the clock which shows the time mentioned below.

	1 Hour later			
	2 Hour later			
	1 Hour later			
	2 Hour later			
	3 Hour later			

UNIT-5

2 Information Processing

Modelling - Map Making

5.1 Making a map of known areas.

Map of Mala's Village

Mala has drawn the map of her house.

We shall locate the places from the above map as follows

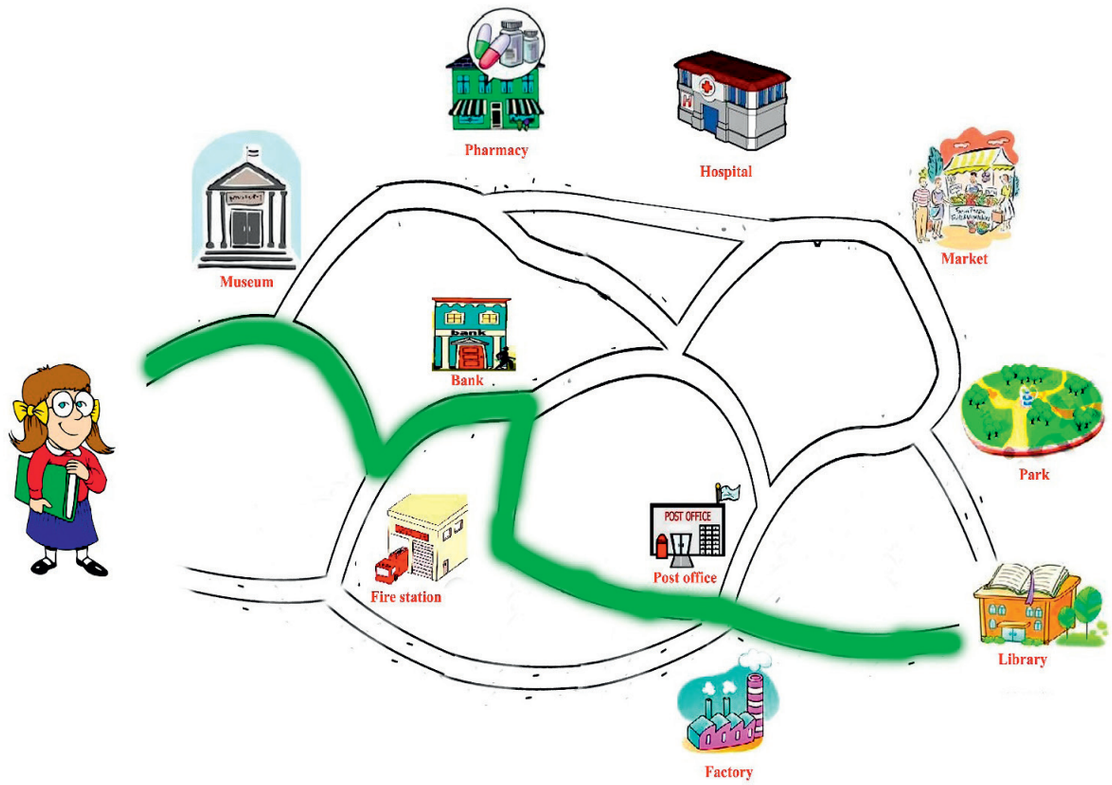
- The garden is in the left side of the house.
- The house is in the right side of the garden
- The river is in the right side of the pond.
- The pond is in the left side of the river.

Activity

Discuss with your friends and draw the map of your classroom.

5.2 Mark routes for the given locations.

Given below is a map of a town showing some important places/ landmarks.
Divya wants to go to library. One of the ways to reach the library from her house is shown below.



Observe the map and answer the following questions.

1. Name the location she passed in the given route.
2. From the library, Divya needs to reach pharmacy. Trace the path and name the landmarks between library and pharmacy.
3. Trace another route from Divya's house to reach library.
4. Mention any two places between museum and park.

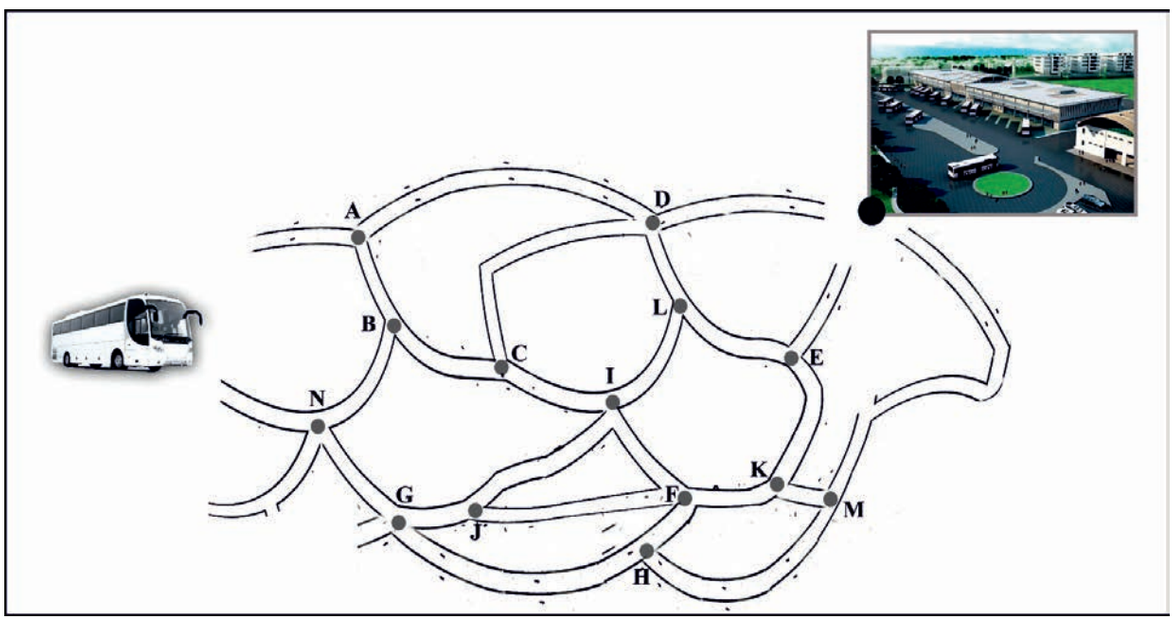
Activity

1. Try to draw map of your school and mark the routes to reach headmaster's room from your class room
2. Collect some puzzles related to road map from your school library.

Exercise

Help the bus driver by marking the routes in the map to land the bus in bus stand.

Mark all the possible routes and suggest the best route.



Ways:

1. A → B → C → I → L → E

2.

3.

4. Write the shortest route.
5. Write the longest route.

J7A2N7

Following and Devising Algorithms

5.3 Devising instructions for going from one location to another on a map

Activity

- Teacher shall prepare chits of locations well known to children.
- Divide the children in groups of two each
- First player will pick up two chits from the lot and show one chit to every one and fix the place as starting point.
- He / She will show second chit only to the teacher. That place in the chit is fixed as the destination
- First player will give clues (i.e) route to help the second player to find the destination.
- The second player shoud find the correct destination. Team which finds the correct destination within the given time is considered as winners.

5.4 The quick way of finding 10 more than and less than a given number.

G9P5S4

Colour the table in the next page by skip counting in tens as per the instructions given below.

1. Colour the numbers starting from 12 in blue.
2. Colour the numbers starting from 6 in pink.
3. Colour the numbers starting from 5 in yellow.
4. Colour the numbers starting from 9 in orange.

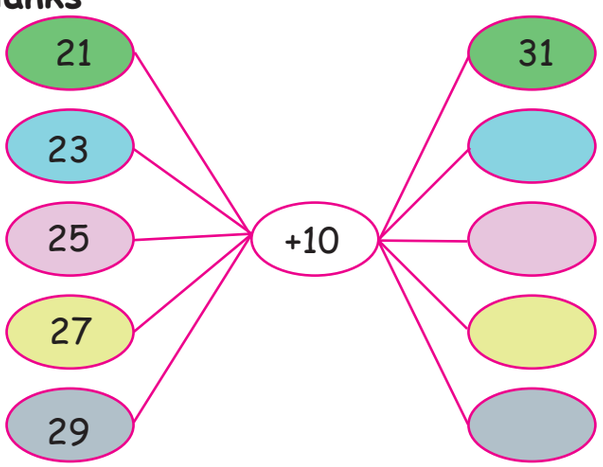
After colouring observe the table and fill in the blanks.

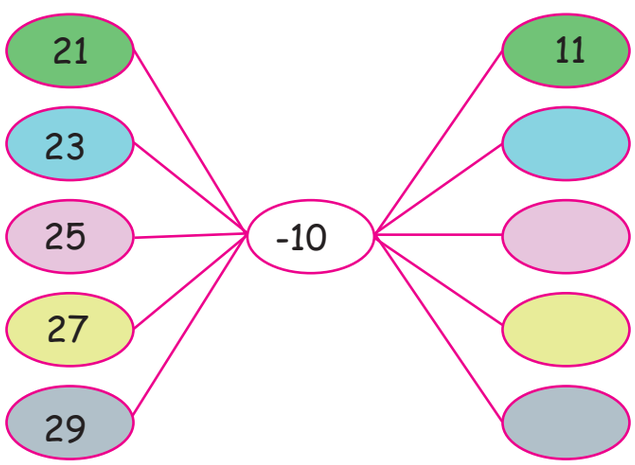
1. 10 more than 45 is _____.
2. 10 less than 45 is _____.
3. 10 more than 22 is _____.
4. 10 less than 22 is _____.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Activity

Complete the blanks





D5B9M7

Class III - Mathematics, Science and Social Science (Term II, Volume 2)
List of Authors and Reviewers

Academic Advisor
Dr. P. Kumar
Joint Director (Syllabus),
SCERT, Chennai.

Academic Co-ordinator
Dr. K.S. Mozhiyarasi
Principal, DIET,
Keelapalur, Ariyalur

Subject Co-ordinator
Maths
K.Revathi
Lecturer, DIET,
Perambalur

N.V. Poornima Devi,
B.T Asst, G.H.S.School,
Palayanur, Tiruvannamalai.

Science
T. Ashok
PG Asst., G.B.H.School,
Ponneri, Thiruvallur.

Social Science
S. Maheswari
P.G. Asst., G.G.H.School,
Villupuram.

Layout Design and Illustration Team
Artist
Johnsmith,
A. Adison Raj
Prasanth C, Yesu Rathinam
Sagaya Arasu,
Santhiyavu Stephen,
Porsellvan,
Adaikkala stephen S
Yuvaraj Ravi

Udhaya Info
Chromepet, Chennai

In-House QC
Rajesh Thangappan
Jerald Wilson C

Wrapper Design
Kathir Arumugam

Coordination
Ramesh Munisamy

Mathematics
Reviewers
Dr. Ramanujam
Professor,
Institute of Mathematical Science, Tharamani,
Chennai.

R. Krithika
Research Centre,
Azim Premji University,
Bangalore

Authors
R.Selvapradha,
Isha Vidhya Ramaniyam
Matric Hr. sec. school,
Vanavasi, Mettur, Salem.

K.Brindha,
Isha Vidhya Ramaniyam
Matric Hr. sec. school,
Vanavasi, Mettur, Salem.

P. Kalpana
B.T. Assistant, PUMS,
Alambakkam,
Pullambadi Union,
Tiruchirappalli.

C .Venkatesan, S.G. Asst,
Govt. A. D. W. Primary
School, Vandarayankattalai,
Ariyalur.

K. Pushparaj
B.T. Assistant, P.U.M.School
Narasingampalayam,
Ariyalur.

S.K .Sivakumar
B.T. Assistant,
P.U.M.School, Edaiyar,
Ariyalur.

C .Thottiyathan
S.G. Asst, P.U.P.School,
Namankunam, Ariyalur.

P. Malarvizhi
BT Asst., P.U.M.School,
Padiyanallur Thiruvallur.

Science
Reviewers
Angeline Ruby
Asst. Professor, SCERT,
Chennai.

Dr. K. Chinthanaiyalan
B.T. Asst., GHS,
Periyar nager,
Nandambakkam,
Kanchipuram.

Authors
Srivathsan Ramasamy
Madhi Foundation,
Chennai.

N. Gopi
BRTE, Nemili Block,
Vellore.

K.Vijayaraj kumar
PGT, Isha vidhaya Infosys
MHSS, Samichettipatti,
Dharmapuri

S. John James
PGT, Isha vidhaya MHSS,
Madavapallam, Cuddalore

M. Mariyadoss
H.M., P.U.M.School,
Palinganatham,
Thirumanoor, Ariyalur.

K. Ganesan,
B.T. Assistant,
P.U.M.School, Vellai
Pichampatti, Trichy.

K. Nirmala Mary,
SGT, P.U.P.School, Aaroor,
Sankarapuram, Villupuram.

Artist
P. Ramer
Drawing Master, GBHSS,
Kamaraj Nagar, Avadi,
Tiruvallur

Social Science
Reviewers
K. Velu, B.T Asst,
G.G.H.S.School,
Thalaivasal, Selam.

Srivathsan Ramasamy
Madhi Foundation,
Chennai.

Authors
S. Gomathi Manickam
B. T Asst, G.H.S.School,
Old Perungalathur,
Kanchipuram.

S. Maheswari
P.G. Asst., G.G.H.S.School,
Villupuram.

S. Abirami, SGT,
P.U.M.School,
T palur, Ariyalur.

QR - Code Management Team
R. Jaganathan
SGT, PUMS -
Ganesapuram, Polur,
Thiruvannamalai.

A. Devi Jesintha,
B.T. Asst, G.H.S,
N.M. Kovil, Vellore

V. Padmavathi, B.T,
B.T. Asst., GHS, Vettriyur,
Thirumanur, Ariyalur Dist.

This book has been printed on 80 GSM Maplitho paper.
Printed by offset at: