



Government of Tamilnadu

STANDARD TWO

TERM II
VOLUME 2

MATHEMATICS

ENVIRONMENTAL STUDIES

NOT FOR SALE

Untouchability is inhuman and a crime.

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ENVIRONMENTAL STUDIES

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MATHEMATICS

TERM 2

CHAIRPERSON

Dr. M. KAMINI DEVI,

Senior Lecturer,
DIET, Kaliyampoondi, Kancheepuram District.

REVIEWERS

CG. ELANGO VAN,

Lecturer,
DIET, Uthamacholapuram,
Salem District.

S. BABU,

Lecturer,
DIET, Thirur,
Thiruvallur District.

AUTHORS

K. RAVINDRANATH,

Headmaster,
PUMS. Gopalapuram,
R. K. Pet, Thiruvallur District.

P. S. IRAIARUL,

B.T., Assistant,
PUMS, Ayarpadi,
Kaveripakkam, Vellore District.

R. HEMAMALINI

B.T. Assistant,
P.C.K.G. Govt. Hr. Sec. School,
Kodambakkam, Chennai-24.

ZENOBIA RAMACHANDRAN,

Middle Grade teaching Assistant,
St. William's Anglo-Indian High School,
Royapettah, Chennai - 14.

S. JAYANTHI,

Senior Vice Principal (Hr. Sec.),
Everwin Matric Hr.Sec.School,
Kolathur, Chennai - 99

M.H. SHARMILA,

Vice Principal (High School),
Everwin Matric Hr.Sec.School,
Kolathur, Chennai - 99.

LAYOUT

V. JAMES & R. RAJA

1. Comparison of Numbers

Formation of 2-digit numbers without repetition.

Let us learn to form 2-digit numbers with the given digits.

Example

Take two numbers 2 and 6

using the given numbers, we can form two digit numbers 26 and 62.

The greater number is 62.

The smaller number is 26.



Fill the given box

Numbers	Greater number	Smaller number
4, 7		
6, 9		
8, 5		
9, 3		

Think it over!

If zero is one of the given two digits,
how many 2 digit numbers can be formed ?

Form 2-digit number using the following digits. Write the greater and smaller number.

★ 4 and 5

★ 7 and 9

★ 4 and 9

★ 2 and 3

★ 1 and 8

★ 5 and 3



Example

Using the three given numbers **3, 4** and **6**,
we get **34, 43, 46, 64, 63** and **36**

The greatest number is **64**.

The smallest number is **34**.

If one of the digits is **0**, We can form only four 2-digit numbers
For example, using the numbers **3, 0** and **6**

we get **30, 36, 63, 60**.

The greatest number is **63**.

The smallest number is **30**.

ACTIVITY

Form six 2-digit numbers, circle the smallest number and underline the greatest. The first one is done for you.

1,3,5	<u>13</u>	31	35	<u>53</u>	51	15
3,6,7						
4,2,0						
5,8,2						
6,5,1						
7,9,3						

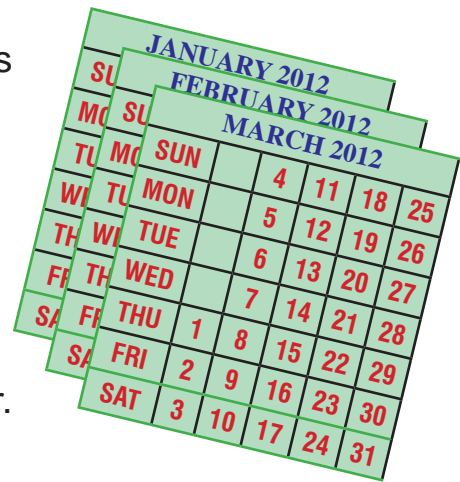


Among the three digits if two digits are zero, how many 2-digit numbers can be formed?



ACTIVITY

The teacher may prepare the number cards with the help of the children.



Collect the used sheets of monthly calendar.

Cut the numbers from 1 to 9.

Stick the number in a card board and cut each number separately.

Prepare as many sets of number cards as possible.

Divide the class into groups having 4 or 5 children .


Provide each group a set of number cards.

Using the number cards ask the children to form as many 2 digit numbers as possible.

Ask them to write down the greater and smaller number.

Ask the children to repeat the activity using different sets of number cards.

Record, which group formed the maximum number pairs?

Note : Add the number card  also and ask the children to find out the greater and smaller number.

Formation of 2-digit numbers with repetition.

Take two numbers say **3** and **7**. If the given numbers are repeated in ones and tens place we get, **33** and **77**.

The greater number is **77**.

The smaller number is **33**.

Take another example, **5** and **9**

The greater number is **99**

The smaller number is **55**

★ Form the greatest and the smallest number using **8** and **6**

Let us take three numbers **4, 5, 8**.

The greatest number is **88**.

The smallest number is **44**.

Numbers	Greatest number	Smallest number
3, 9		
4, 8		
2, 7, 5		
6, 3, 8		
1, 7, 9		

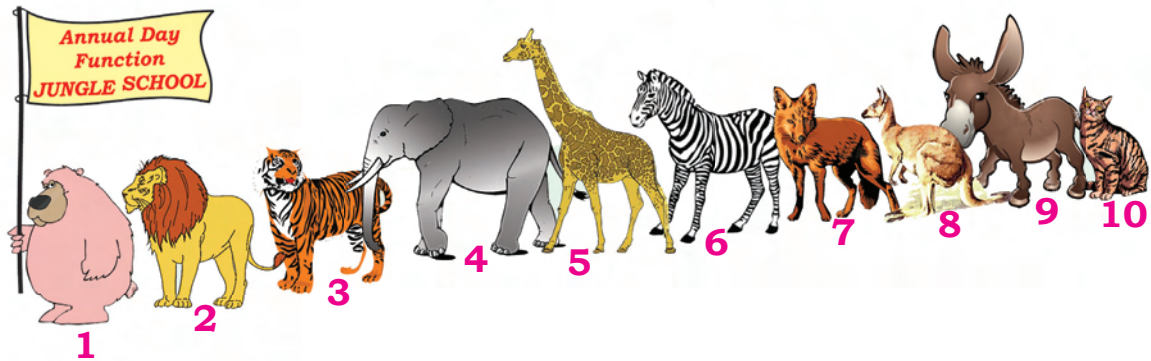
Think !

If one of the given numbers is zero, think of the greatest and smallest number.



Ordinal and Cardinal numbers.

Look at the animals.



The bear is standing in the first position.

The lion is standing second.

The zebra is the sixth animal in the line. Its position is sixth.

The cat is the tenth animal in the line. Its position is tenth.

Here first, second, third, are ordinal numbers.

An ordinal number tells the position of an object or a person in a collection.

A cardinal number tells the number of objects or persons in a collection.

Read and learn.

Cardinal		Ordinal	
1	One	1 st	First
2	Two	2 nd	Second
3	Three	3 rd	Third
4	Four	4 th	Fourth
5	Five	5 th	Fifth
6	Six	6 th	Sixth
7	Seven	7 th	Seventh
8	Eight	8 th	Eighth
9	Nine	9 th	Ninth
10	Ten	10 th	Tenth

Ordinal and Cardinal number of weeks and months.

Sunday is the first day of the week.

Wednesday is the _____ day of the week.

Friday is the _____ day of the week.

Saturday is the _____ day of the week.

January is the _____ month of the year.

August is the _____ month of the year.

The number of days in a week is _____

The number of months in a year is _____





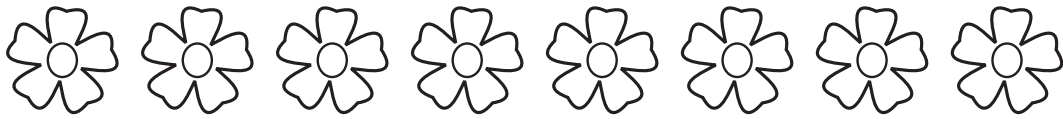
ACTIVITY

Colour it and enjoy !

From the left, colour the 3rd flower in blue.

From the left, colour the 7th flower in red.

From the left, colour the 8th flower in green.



ACTIVITY

Who am I?

My 3rd letter is D.

My 1st and 4th letter are I.

My 5th letter is A.

My 2nd and 6th letter are N.

--	--	--	--	--	--

Teacher's Note



Encourage students to coin many words similar to the word given above.

ACTIVITY

The teacher may call the children as per the attendance roll. The teacher may collect the articles such as eraser, sharpener, coin, crayon etc. which are collected from the class environment. Ask each child to pick anyone object from the table and stand according to their roll number. The following questions may be asked to the children.



What object is with the 1st child?
 What is with the 5th child?
 Who is having the pencil?
 How many of them pick out the eraser?
 The teacher can ask so many questions like these to the children. Repeat the activity with the other children forming groups.

Teacher's Note

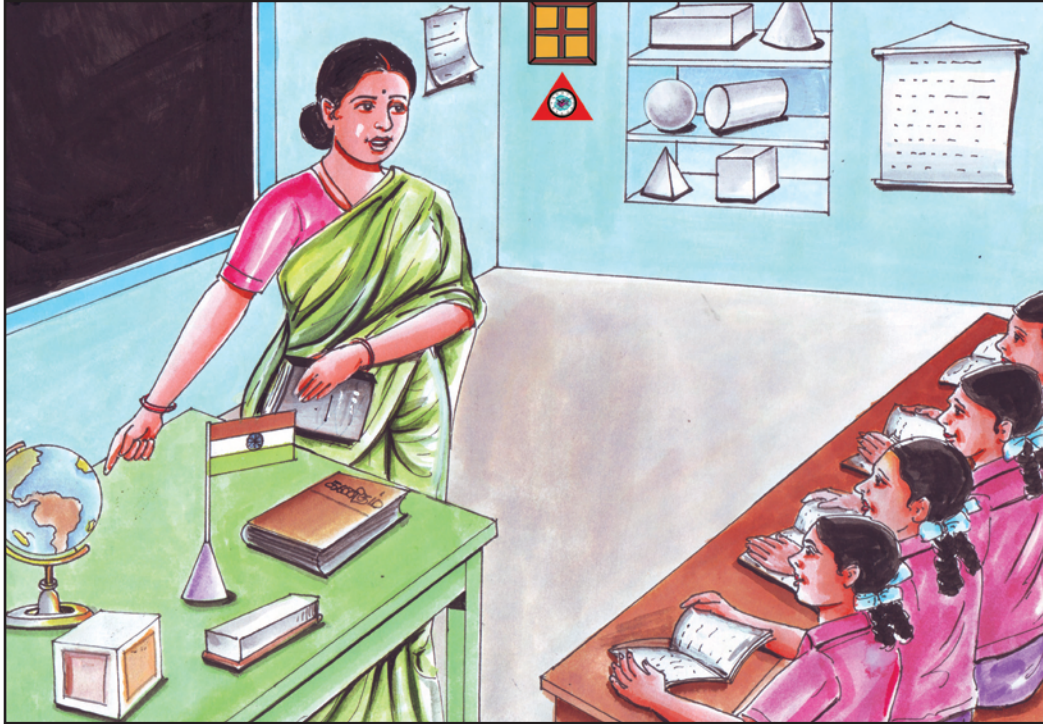
Highlight the use of ordinal numbers through daily life activities.

For example

6th birthday, 2nd child sitting in a row from the left, 1st day of the week, etc...

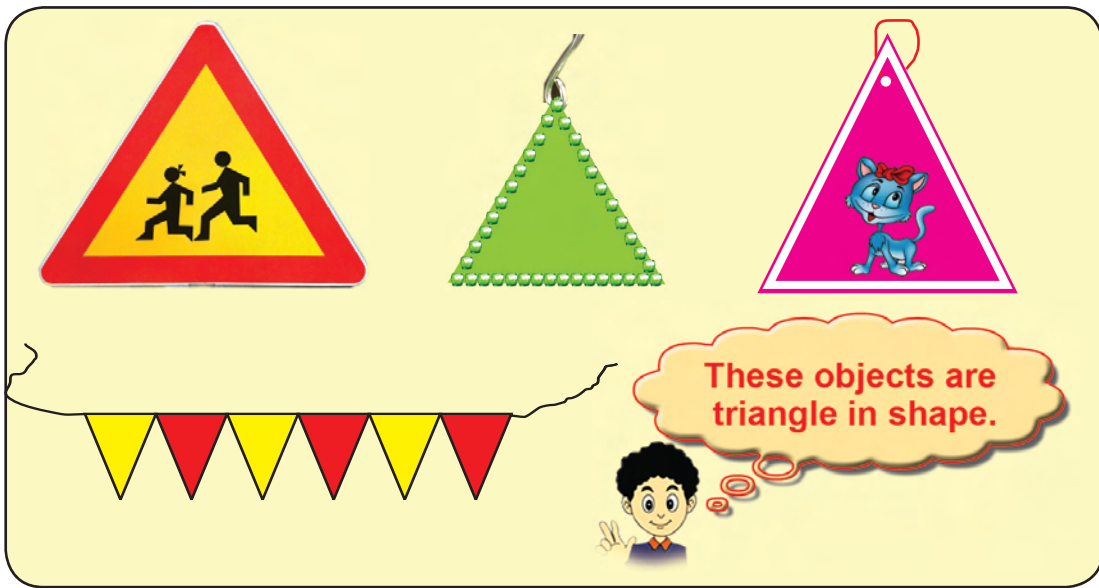
2. Shapes

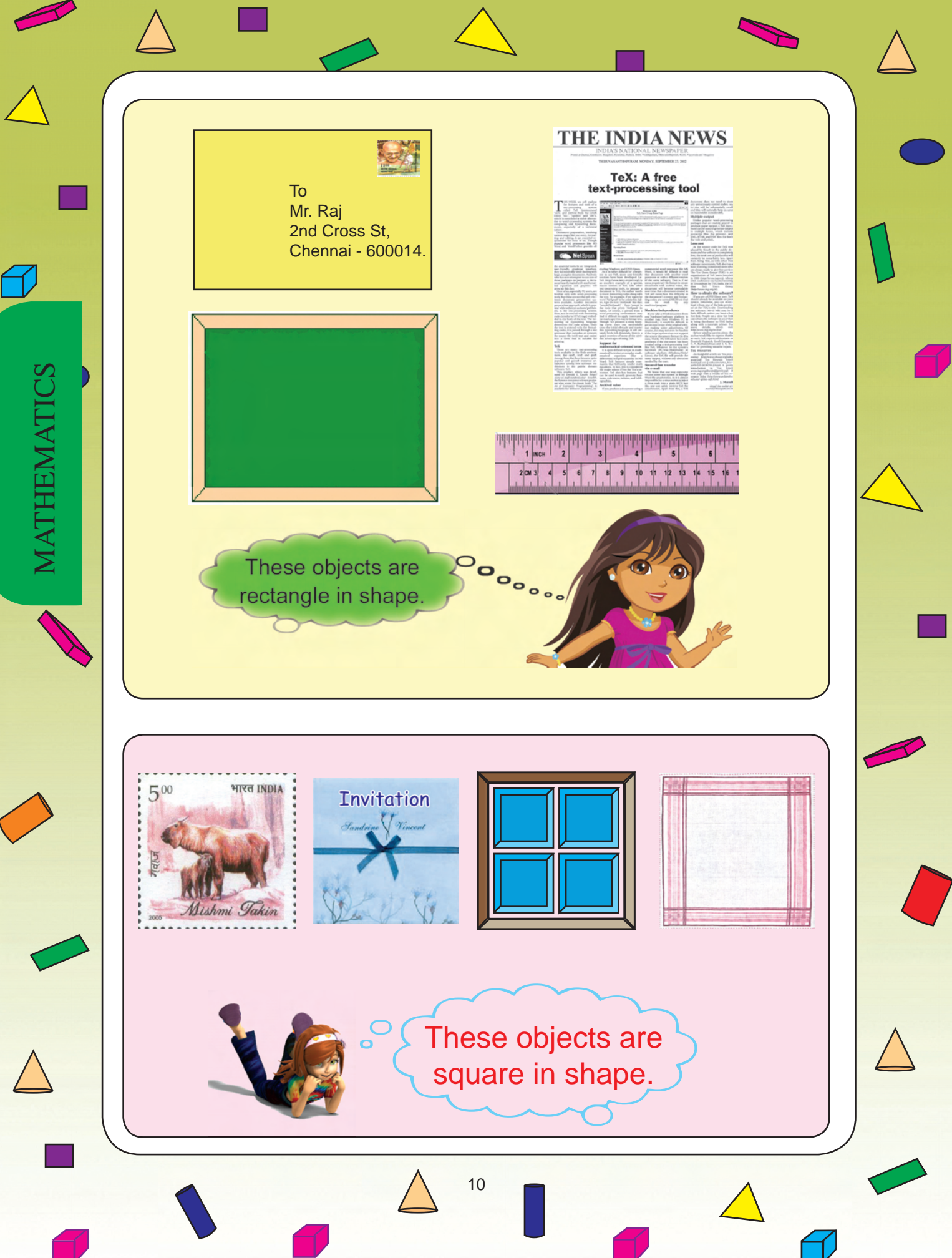
Observe the classroom.



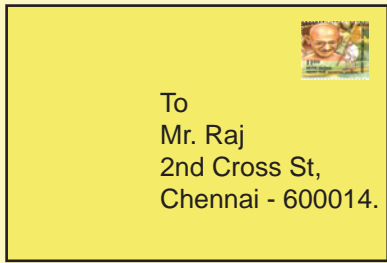
Teacher asks children to identify the different shapes of objects

Let us look at the following pictures.

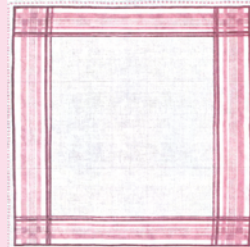
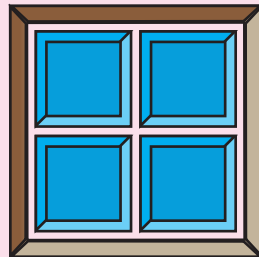




MATHEMATICS

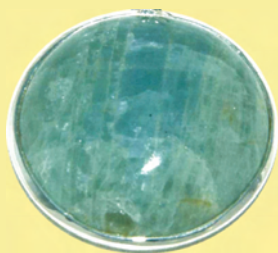


These objects are rectangle in shape.



These objects are square in shape.

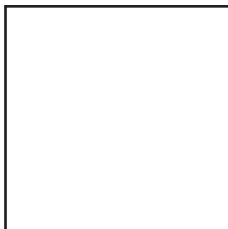
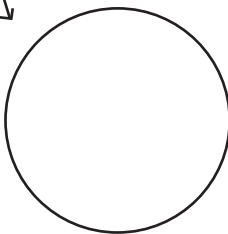
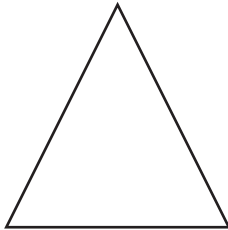
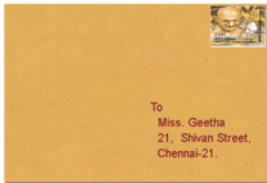
Let us look at the following pictures.



These objects are circle in shape.



Match the following objects with their shapes.



MATHEMATICS

Mark the following objects by representing , , , .

The mirror : _____

Wall clock : _____

A sheet of the book : _____

Ten rupee note : _____

Coin : _____

Hand kerchief : _____

Compact disc : _____

Fastoons : _____

Teacher's Note



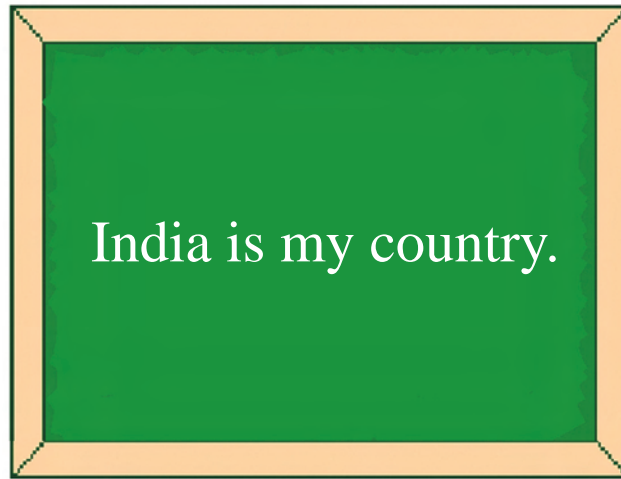
Add many more objects found in the classroom situation to practice the children.

ACTIVITY

Make the figures such as triangle, rectangle, square using straws and Midribes of coconut leaves (broom sticks).

Think : Can you make circle using small sticks.

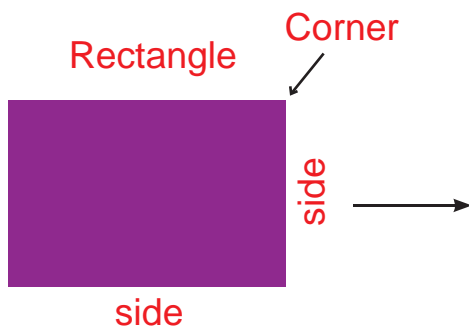
Two dimensional shapes.



Any flat surface is a plane. A plane has two dimensions.

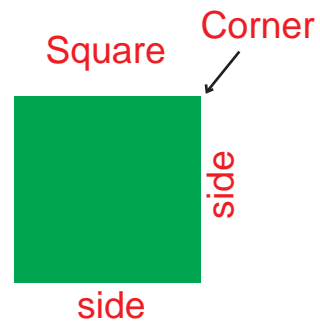
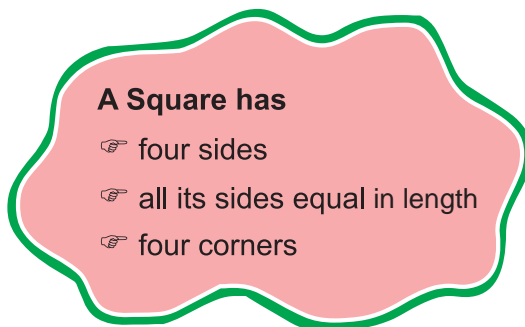
Examples :

top of the table, top of a text book, a sheet of newspaper, floor.

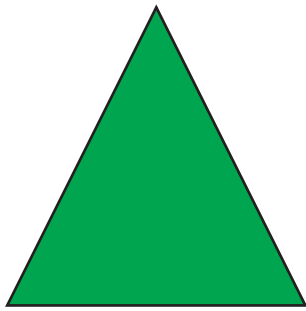


A rectangle has

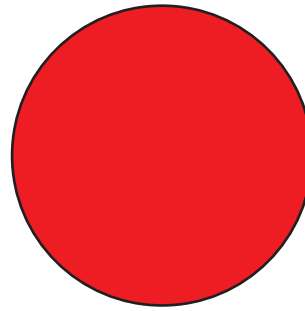
- ☞ four sides
- ☞ its opposite sides equal in length
- ☞ four corners



Triangle



Circle



A Triangle has

- ☞ three sides which need not be equal in length
- ☞ three corners

A Circle has

- ☞ no sides
- ☞ no corners

Fill in the blanks.

A square has _____ equal sides.

A rectangle has _____ sides.

In a rectangle the _____ sides are equal.

A triangle has _____ corners.

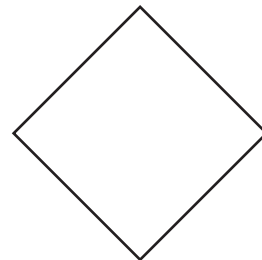
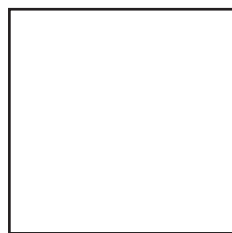
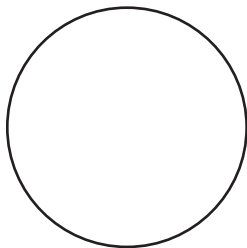
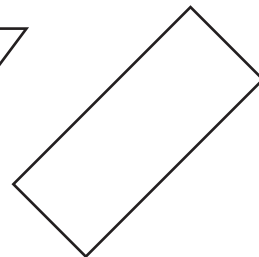
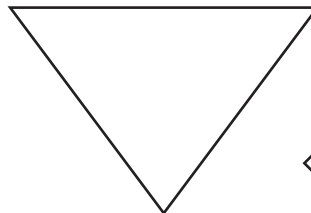
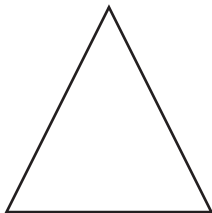
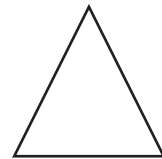
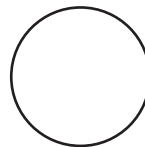
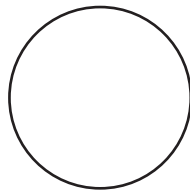
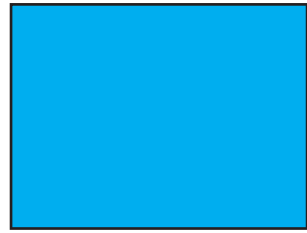
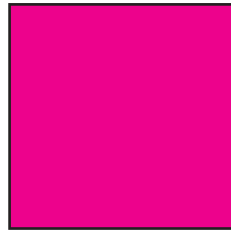
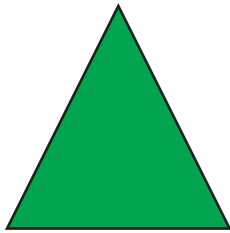
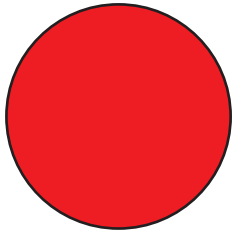
A circle has _____ sides.

A square has _____ corners.

A triangle has _____ sides.

A circle has _____ corners.

Colour the following shapes as given below.

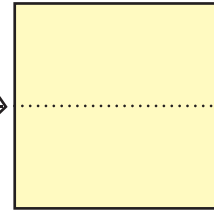


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Lines.

Take a plain sheet of paper and fold one side onto the opposite side. Press the sheet with your hands to form a crease and unfold the paper.

The crease gives you the idea of a straight line.



A line can be straight or curved.



Straight line












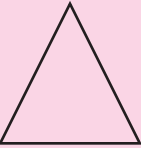
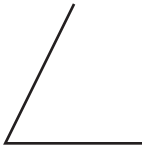
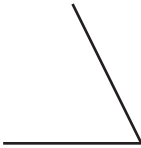













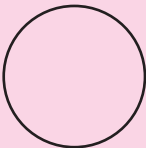



Curved line

Shall we draw straight lines ?

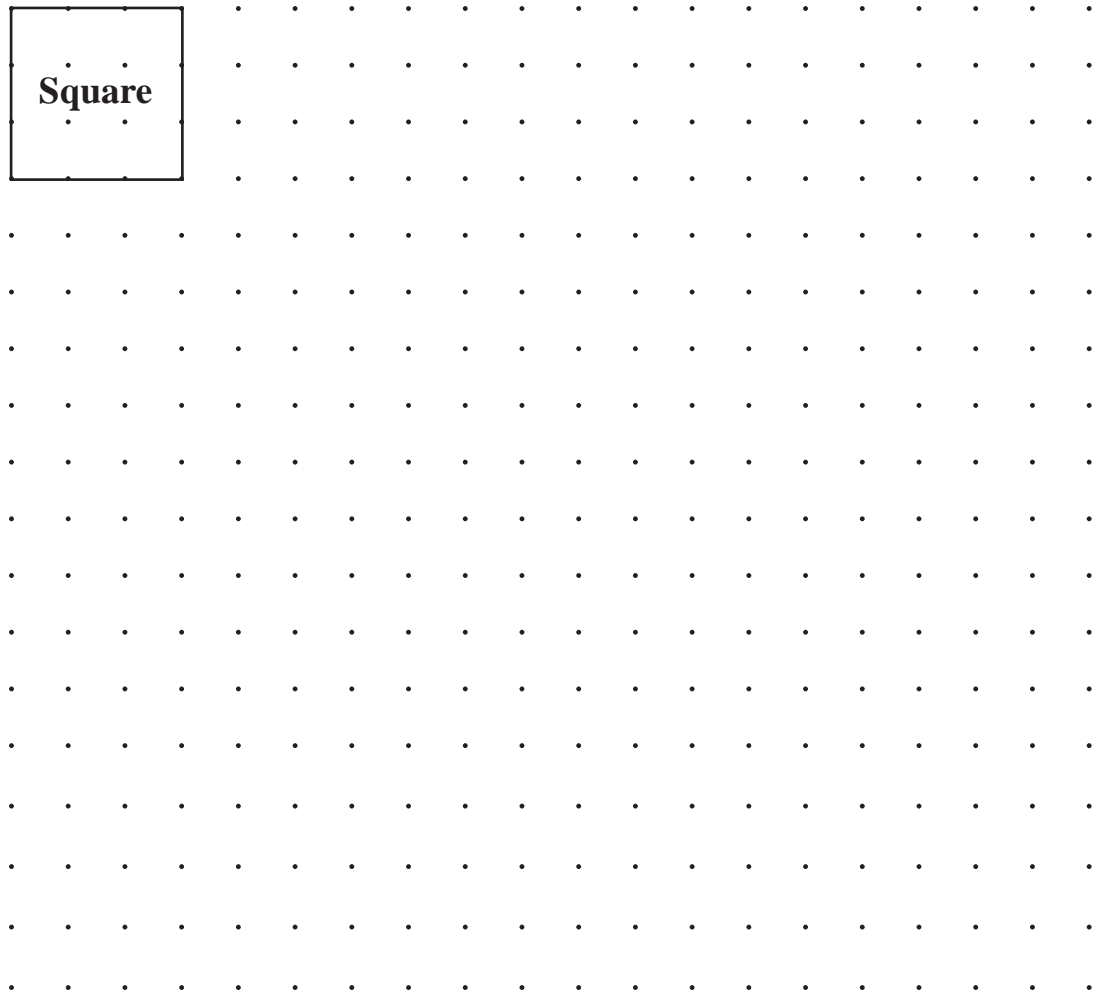
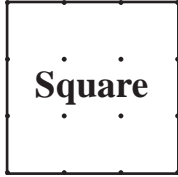
Draw lines using these objects in your note book.



Complete the following using straight and curved lines.

Enjoy drawing squares, rectangles, triangles and straight lines by joining the dots as you like



MATHEMATICS



Think it over

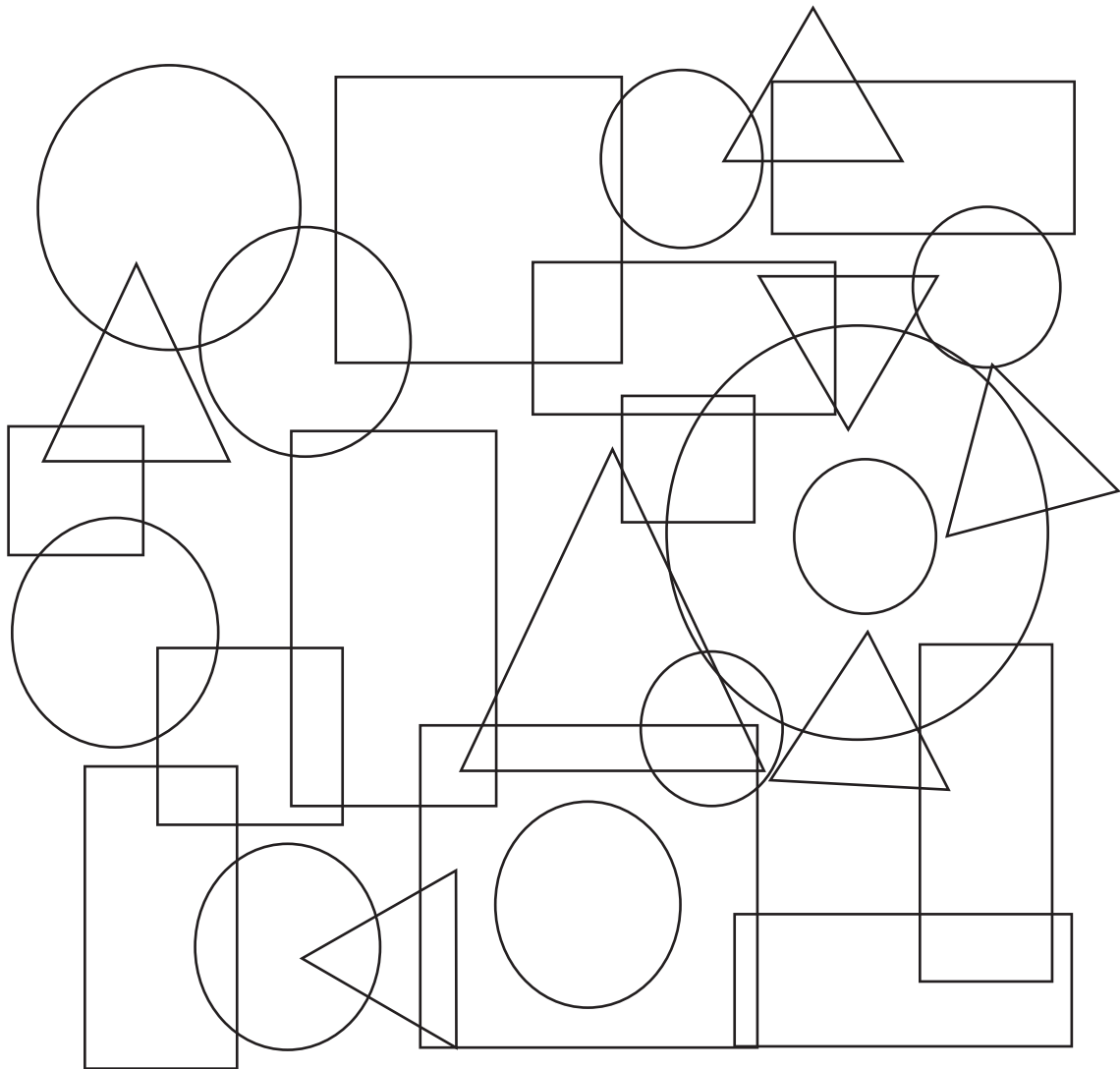
Can you draw a circle by joining the above dots?



Complete the given table using straight and curved lines.

3	3	3	3	3	3
9		9			
C					C
6			6		
2	2				
S		S			
W			W		
8				8	
Z					

Count the circles, triangles, squares and rectangles in this jumble. Write the answers in blank spaces given below.



Triangles _____

Squares _____

Rectangles _____

Circles _____

3. Subtraction

Let us recall !

Subtract the following.

$9 - 4 = 5$

$9 - 4 = 5$

$9 - 4 = 5$

$9 - 4 = 5$

$9 - 4 = 5$

$9 - 4 = 5$

$9 - 4 = 5$

$9 - 4 = 5$



Subtract the following

$5 - 3 = \text{☆}$

$3 - 2 = \text{☆}$

$7 - 2 = \text{☆}$

$10 - 2 = \text{☆}$

$6 - 4 = \text{☆}$

$10 - 3 = \text{☆}$

$8 - 4 = \text{☆}$

$9 - 3 = \text{☆}$

$2 - 1 = \text{☆}$

$6 - 3 = \text{☆}$

$15 - 3 = \text{○}$

$12 - 8 = \text{○}$

$10 - 6 = \text{○}$

$11 - 9 = \text{○}$

$7 - 0 = \text{○}$

$19 - 4 = \text{○}$

$14 - 10 = \text{○}$

$15 - 2 = \text{○}$

$20 - 10 = \text{○}$

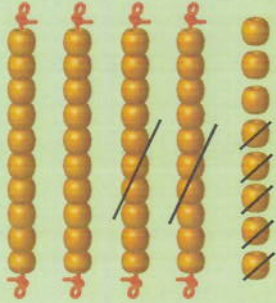
$13 - 7 = \text{○}$



Subtraction of two-digit numbers without regrouping.

Subtract 25 from 48.

$$48 - 25 = \square$$



T	O
4	8
2	5
	3

First subtract the digits in the ones place,

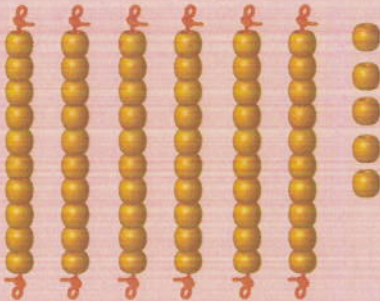
T	O
4	8
2	5
2	3

then subtract the digits in the tens place.

$$48 - 25 = 23$$

Subtract 23 from 65.

$$65 - 23 = \square$$



T	O
6	5
2	3

$$65 - 23 = \square$$





Subtract the following.

T	O
8	4
3	1

T	O
9	6
4	2

T	O
6	8
2	6

T	O
9	5
5	4

T	O
8	6
2	4

T	O
4	5
2	3

T	O
5	7
3	4

T	O
6	8
2	6

T	O
8	9
5	2

T	O
7	8
5	5

T	O
9	8
7	2

T	O
5	6
4	1

Subtract

17 from 39
 24 from 87
 45 from 76



63 from 98
 50 from 65
 36 from 48

If a number is subtracted from itself, the result is zero.



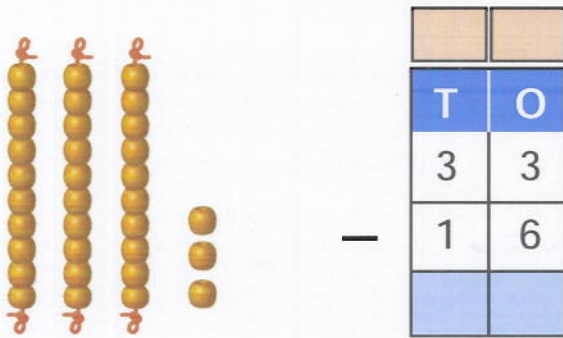
Example.

5 - 5 = 0
 4 - 4 = 0
 12 - 12 = 0



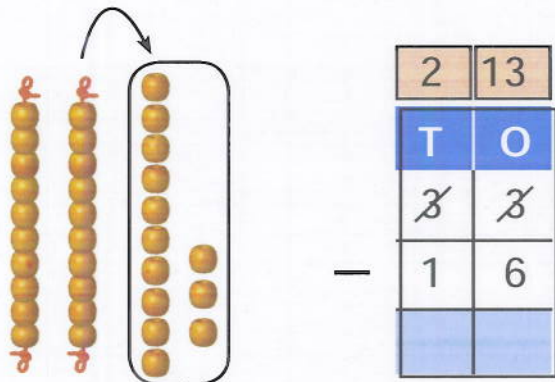
Subtraction of 2-digit numbers with regrouping.

Let us subtract 16 from 33.

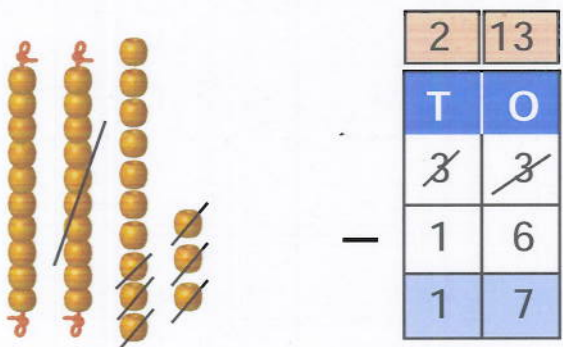


As $3 < 6$, we cannot subtract 6 ones from 3 ones.

So, we regroup 1 ten into 10 ones.



10 ones + 3 ones = 13 ones.



subtract

13 ones - 6 ones = 7 ones.

subtract

2 tens - 1 ten = 1 ten.

$$33 - 16 = \boxed{17}$$

