



**GOVERNMENT OF TAMIL NADU**

**STANDARD ONE**

**TERM - I**

**VOLUME 2**

**MATHEMATICS**

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## FOREWORD

The Colourful world of children is full of excitement and spectacular thoughts! Their imaginative power can even attract the wild creatures to accompany them in a friendly manner. Their enthusiasm and innovative prescription can even trigger the non-living entities and enchant the poetic Tamil. It is nothing but a bundle of joy blended with emotions when you travel into their creative world.

We have tried our level best to achieve the following objectives through the new Text Books by gently holding the tender hands of those little lads.

- To tune their mind away from rote-learning and guide them into the world of creativity.
- To make the children be proud of their ancient history, culture, art and rich Tamil literature.
- To march triumphantly with confidence into the modern world with the help of Science and Technology.
- To facilitate them to extend their journey of learning beyond the text book into the world of wisdom.

These new Text Books are studded with innovative design, richer content blended with appropriate psychological approach meant for children. We firmly believe that these newly designed text books will certainly create a sparkle in your mind and make you explore the world afresh.



## THE NATIONAL ANTHEM

Jana-gana-mana-adhinayaka jaya he  
Bharata-bhagya-vidhata.  
Punjaba-Sindhu-Gujarata-Maratha-  
Dravida-Utkala-Banga  
Vindhya-Himachala-Yamuna-Ganga  
Uchchhala-jaladhi-taranga  
Tava subha name jage,  
Tava Subha 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.

- Rabindranath Tagore.



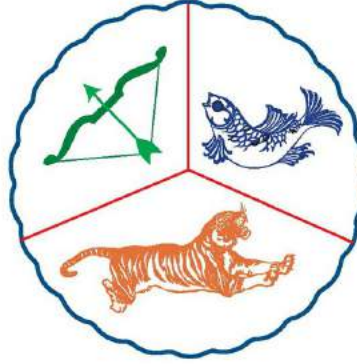


## தமிழ்த்தாய் வாழ்த்து

நீராருங் கடலுடுத்த நிலமடந்தைக் கெழிலொழுகும்  
சீராரும் வதனமெனத் திகழ்பரதக் கண்டமிதில்  
தெக்கணமும் அதிற்சிறந்த திராவிடநல் திருநாடும்  
தக்கசிறு பிறைநுதலும் தரித்தநறுந் திலகமுமே!  
அத்திலக வாசனைபோல் அனைத்துலகும் இன்பமுற  
எத்திசையும் புகழ்மணக்க இருந்தபெருந் தமிழணங்கே!  
தமிழணங்கே!

உன் சீரிளமைத் திறம் வியந்து செயல் மறந்து வாழ்த்துதுமே!  
வாழ்த்துதுமே!  
வாழ்த்துதுமே!

- 'மனோன்மணியம்' பெ. சுந்தரனார்.

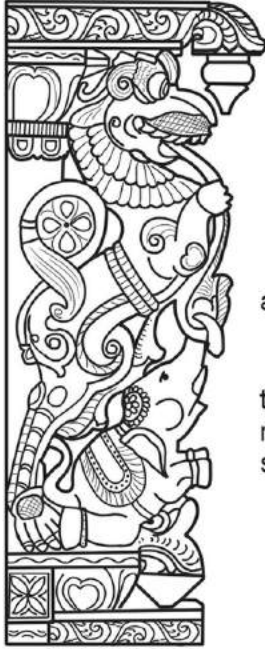


## தமிழ்த்தாய் வாழ்த்து – பொருள்

ஒலி எழுப்பும் நீர் நிறைந்த கடலெனும் ஆடையுடுத்திய நிலமெனும் பெண்ணுக்கு, அழகு மிளிரும் சிறப்பு நிறைந்த முகமாகத் திகழ்கிறது பரதக்கண்டம். அக்கண்டத்தில், தென்னாடும் அதில் சிறந்த திராவிடர்களின் நல்ல திருநாடும், பொருத்தமான பிறை போன்ற நெற்றியாகவும், அதிலிட்ட மணம் வீசும் திலகமாகவும் இருக்கின்றன.

அந்தத் திலகத்தில் இருந்து வரும் வாசனைபோல, அனைத்துலகமும் இன்பம் பெறும் வகையில் எல்லாத் திசையிலும் புகழ் மணக்கும்படி (புகழ் பெற்று) இருக்கின்ற பெருமைமிக்க தமிழ்ப் பெண்ணே! தமிழ்ப் பெண்ணே! என்றும் இளமையாக இருக்கின்ற உன் சிறப்பான திறமையை வியந்து உன் வாய்ப்பட்டு எங்கள் செயல்களை மறந்து உன்னை வாழ்த்துவோமே! வாழ்த்துவோமே! வாழ்த்துவோமே!





## THE NATIONAL INTEGRATION PLEDGE

"I solemnly pledge to work with dedication to preserve and strengthen the freedom and integrity of the nation."

"I further affirm that I shall never resort to violence and that all differences and disputes relating to religion, language, region or other political or economic grievances should be settled by peaceful and constitutional means."

## A STUDENT'S VOW BEFORE MOTHER INDIA

Name :

Class :

School :

"I shall overcome the obstacles raised by caste and communal prejudices and work for the greatness of my Motherland putting to the fullest use the benefits that I derive through education.

Vande mataram!

Signature



**Untouchability is Inhuman and a Crime**

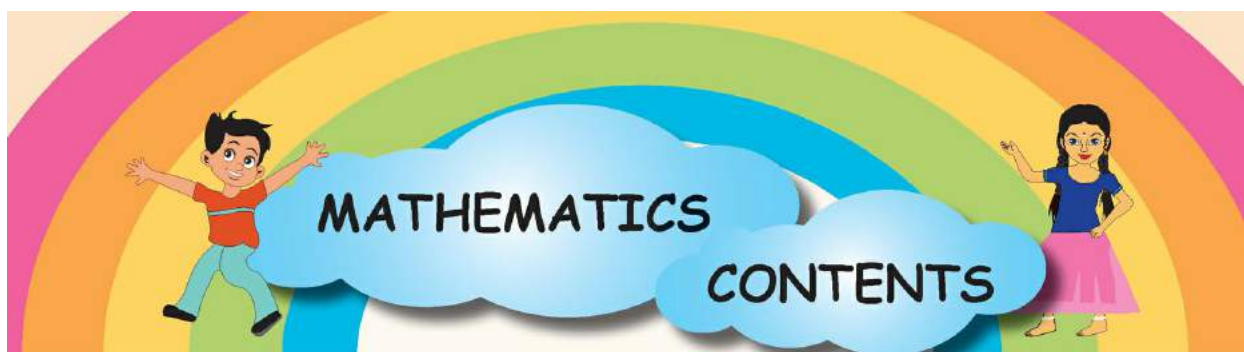
# MATHEMATICS

## STANDARD ONE

### TERM - I

VOLUME 2





## Unit 1 Geometry

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Text book



DIGI Links



Evaluation



## Unit 1

## Geometry

### 1.1 Comparisons

#### Keywords

Top - Bottom

Inside - Outside

On - Under

Above - Below

Far - Near

Big - Small

#### Travel through



Sit sit sit  
sit **inside** the class;

Jump jump jump  
jump **on** the floor;

Crawl crawl crawl  
crawl **under** the table;

Go go go  
go **far** from the table;

Come come come  
come **near** the board;

Play play play  
play **outside** the class.



#### Teacher's note

Teacher can create a rhyme using other spatial vocabulary such as Top-Bottom, Above-Below and Big-Small.



## Top - Bottom

### Learn

The blue colour book is at the **top**.  
The red colour book is at the **bottom**.



### Practice

Tick (✓) the boy at the **bottom** of the slide.

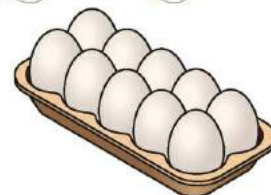


Tick (✓) the pot at the **top**.



### Try this

How will you arrange these items inside the bag? Why?



## Inside - Outside

### Learn



Papaya has its seeds **inside**.

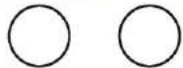


Cashew has its nut **outside**.

### Practice



Tick (✓) the dog  
**inside** the kennel.



Circle the sparrow  
**outside** the nest.



### Try this



Where will you play these games? Why?





## On - Under

### Learn



### Teacher's note

Teacher narrates the story of 'Monkey and the Cap seller' for enhancing the spatial vocabulary, on - under.





## Above - Below

### Learn

Eyes are **above** the nose.  
The mouth is **below** the nose.



### Practice

Circle the bird flying  
**below** the tree.

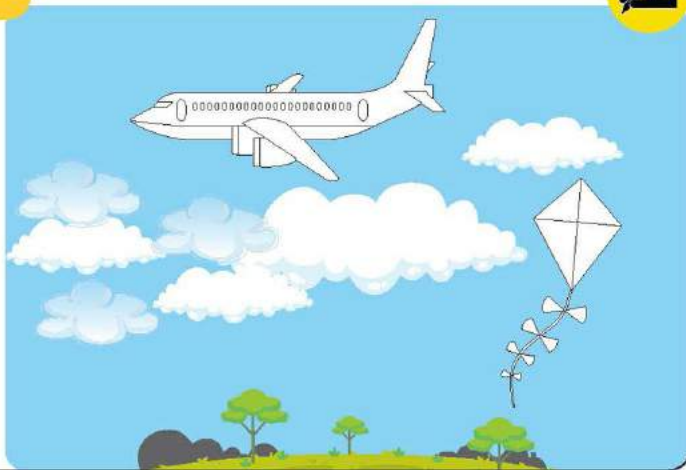


Circle the clock seen  
**above** the calendar.



### Pleasure time

Colour the flying  
aeroplane **above**  
the clouds with  
**red** and the kite  
**below** the clouds  
with **orange**.



## Far - Near

### Learn



The bus is **near** the bus stop.

The car is **far** from the bus stop.

### Practice



Colour the T-shirt of the boy who is **near** the ball.



Circle the cat which is **far** from the bowl.



### Try this



Who will win the race? Why?



## Big - Small

### Learn



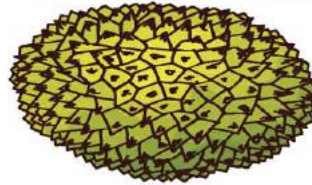
The shark is **big**. The zebra fish is **small**.

### Practice



Tick (✓) the **bigger** one.

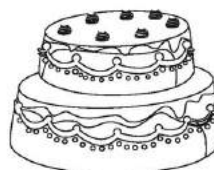
Tick (✓) the **smaller** fruit.



### Pleasure time



Colour the **big** cake with **brown** and the **small** cake with **blue**.





## 1.2 Shapes

### Travel through



### Keywords

Round  
Flat

Corner  
Edge



Teacher can display the objects similar to the ones shown above and help the children to identify each object. The teacher can help them say orally the names of the objects that are round and flat by touching the objects.

### Learn



The ball is round.



The slate is flat.



The book is flat.



The orange is round.

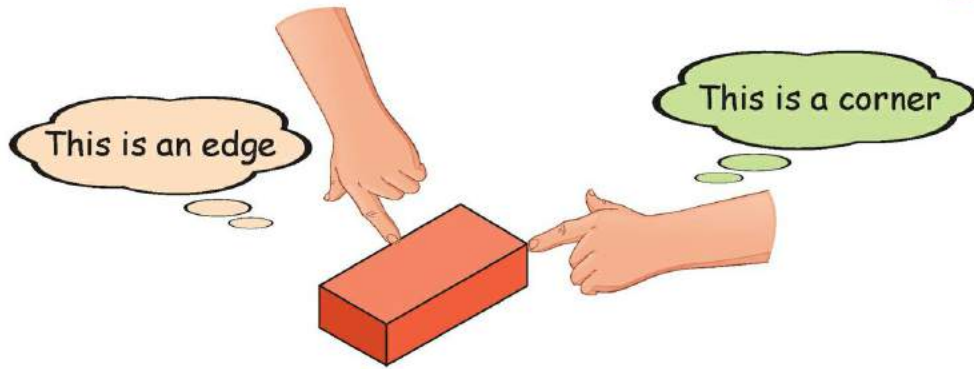
### Practice

Tick (✓) the following objects as round or flat.

| Object  | Round | Flat |
|---|-------|------|
|  |       |      |
|  |       |      |

## Corner, Edge

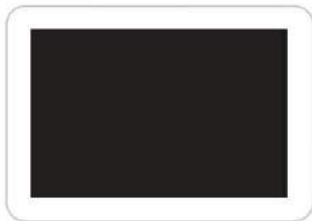
### Learn



### Practice



Colour the corner



Trace the edge



### Think like a mathematician



## Unit 2

## Numbers

### 2.1 Numbers from 1 to 9

#### Keywords

Numbers

Count

More / Less

Order

#### Travel through



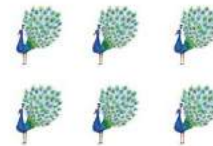
One little kitten is sitting  
in the garden;  
Two pretty birds are flying  
over there;



Three clever monkeys are  
jumping on the tree;  
Four dotted deer are making  
them glad;



Five dark clouds are joining  
over the sky;



Six pretty peacocks are  
dancing side by side;



Seven coloured rainbow is  
bowing its head;



Eight legged spider is knitting  
its web;



Nine cute rabbits are watching  
all these.

#### Teacher's note

Teacher should make the children to sing after her with  
action and to count the numbers from 1 to 9 spontaneously.



## Matching one to one

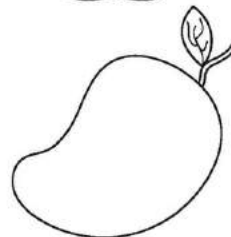
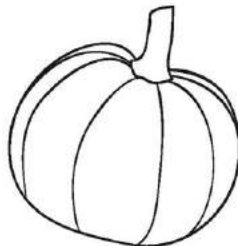
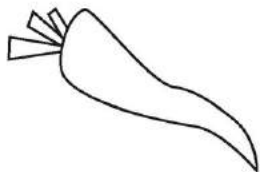
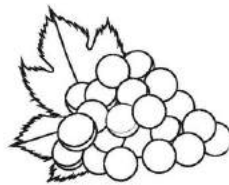
Learn



Practice



Observe the above pictures and colour the following.

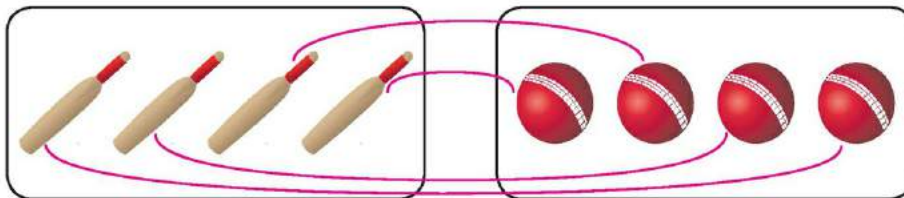




## Learn



Connect the pairs



## Practice



Connect the pairs

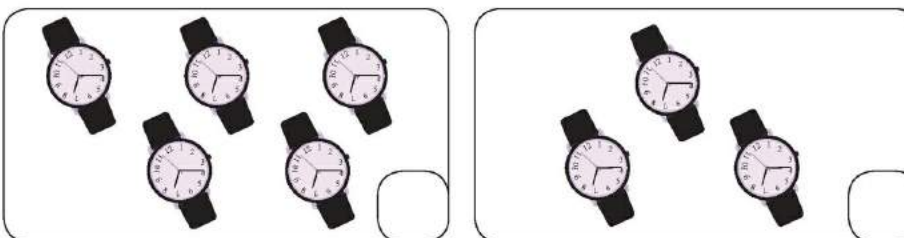


More or Less

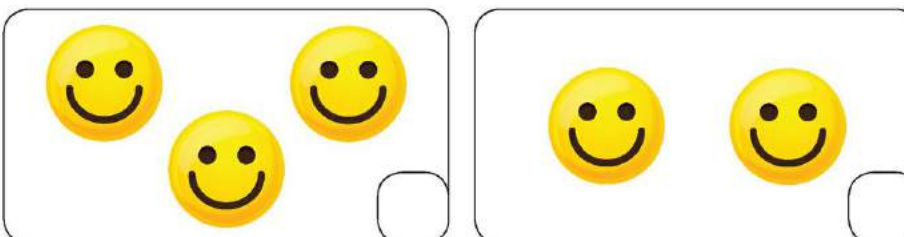
## Practice



Tick (✓) the box that has **more** watches.



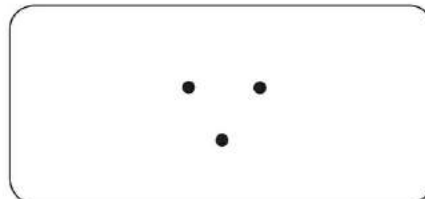
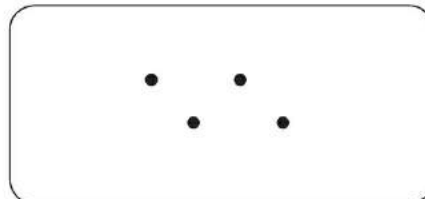
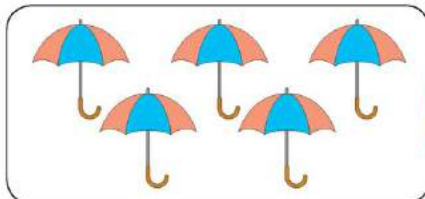
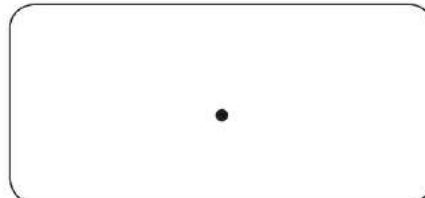
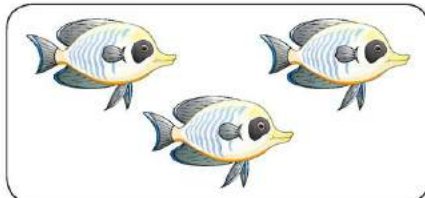
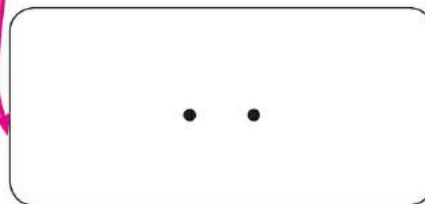
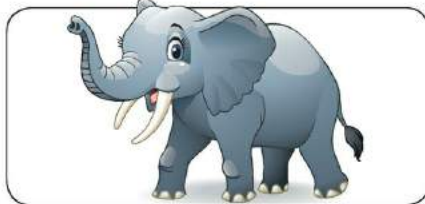
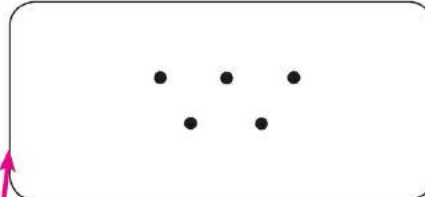
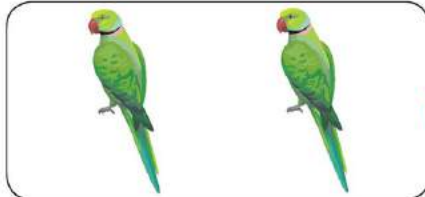
Tick (✓) the box that has **less** smileys.



## Practice



Count the objects and match with the number of dots.



### Teacher's note




Teacher should make the children to count the number of pictures and match with the dots.

## Number 1

### Learn



Let us learn numbers from 1 to 9 in different ways.

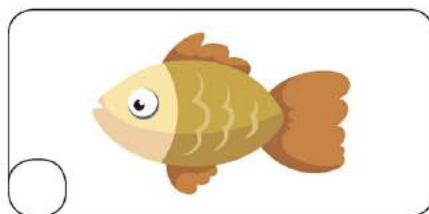
|   |   |   |     |
|---|---|---|-----|
|  |  |  |     |
| One bus   | One bead  | One finger  | One |

### Practice



|   |   |   |   |
|---|---|---|---|
| ↓ | ⋮ | ⋮ | ⋮ |
|   |   |   |   |
|   |   |   |   |

### Count and write






How many tails do animals have?



## Number 2

### Learn



|   |   |   |     |
|---|---|---|-----|
|  |  |  | 2   |
| Two fishes  | Two beads   | Two fingers   | Two |

### Practice



|   |   |   |   |
|---|---|---|---|
| 2 | 2 | 2 | 2 |
|   |   |   |   |
|   |   |   |   |

### Try this



Shade the stars that are numbered 2 and say the pattern in it.



List out the organs in our body that are 2 in number.








## Number 3





### Learn



|   |   |  |          |
|---|---|--|----------|
|  |  |  | <b>3</b> |
| Three umbrellas   | Three beads   | Three fingers  | Three    |

### Practice



|   |   |   |   |
|---|---|---|---|
|  |  |  |  |
|   |   |   |   |
|   |   |   |   |

Circle the figures that are seen three times



### Know more





A few other names used to denote 3  
triple, thrice.



## Number 4





### Learn



|   |   |   |   |
|---|---|---|---|
|  |  |  |  |
| Four flowers  | Four beads  | Four fingers  | Four  |

### Practice



|   |   |   |   |
|---|---|---|---|
|  |  |  |  |
|   |   |   |   |
|   |   |   |   |

Circle the figures that are seen four times.



### Know more



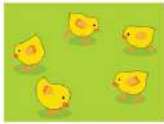


There are 4 directions  
north, east, west, south.



## Number 5


### Learn



|   |   |   |          |
|---|---|---|----------|
|  |  |  | <b>5</b> |
| Five chicks   | Five beads  | Five fingers  | Five     |

### Practice



|   |   |   |   |
|---|---|---|---|
|  | 5 | 5 | 5 |
|   |   |   |   |
|   |   |   |   |

Colour any five pots. How did you choose them?



### Know more



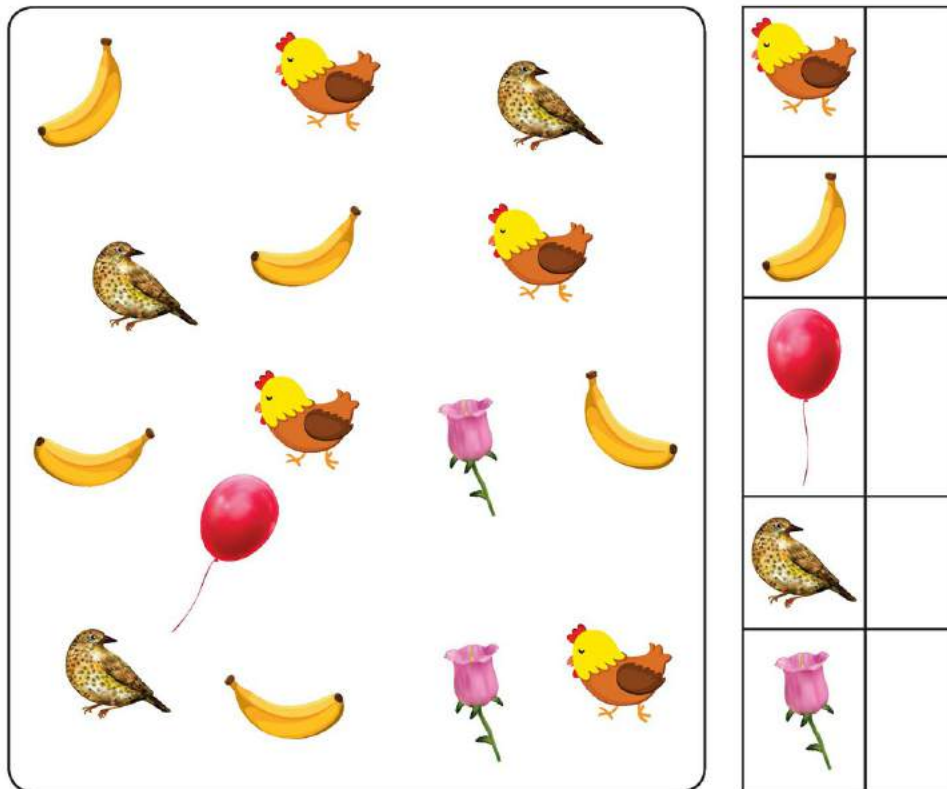
The five sense organs in our body  
eyes, nose, tongue, ears, skin.



## Practice



Look at the chart and write how many times each picture is present in the chart.



## Activity



Keep some beads on the table. Ask the students to pick up the number of beads as instructed by the teacher and assess their counting.



### Teacher's note




Use only numbers from 1 to 5.



## Number 6

### Learn



|   |   |  |     |
|---|---|--|-----|
|  |  |  | 6   |
| Six boats   | Six beads   | Six fingers  | Six |

### Practice



|   |   |   |   |
|---|---|---|---|
| 6 | 6 | 6 | 6 |
|   |   |   |   |
|   |   |   |   |

### Activity



Make the star with sticks similar to the picture given.  
How many sticks you need?



### Try this






Underline the six lettered words in this page.

## Number 7

### Learn



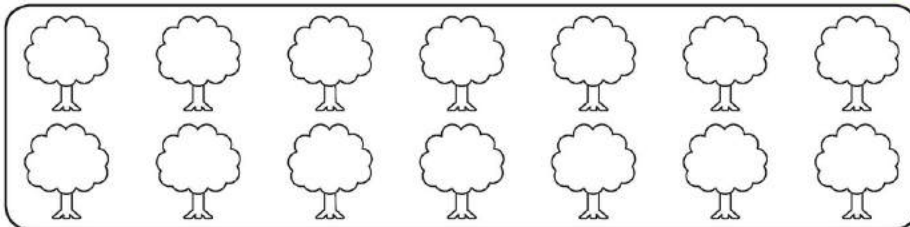
|   |   |  |       |
|---|---|--|-------|
|  |  |  | 7     |
| Seven birds   | Seven beads   | Seven fingers  | Seven |

### Practice



|   |   |   |   |
|---|---|---|---|
| 7 | 7 | 7 | 7 |
|   |   |   |   |
|   |   |   |   |

Colour any seven trees. How did you select these?



### Activity






How many colours are there in the rainbow?  
Make your own.



## Number 8





### Learn



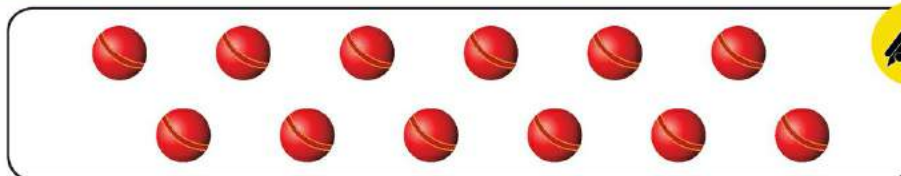
|   |   |  |          |
|---|---|--|----------|
|  |  |  | <b>8</b> |
| Eight starfishes  | Eight beads   | Eight fingers  | Eight    |

### Practice



|   |   |   |   |
|---|---|---|---|
|  |  |  |  |
|   |   |   |   |
|   |   |   |   |

Circle a group of eight balls. Is there any other way of selection?



### Activity



Colour the penguins with different colours. Use only one colour for one penguin. How many colours did you use?



# Number 9

## Learn



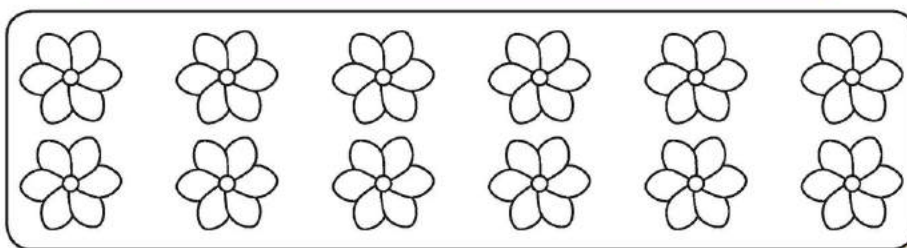
|              |            |              |      |
|--------------|------------|--------------|------|
|              |            |              | 9    |
| Nine pencils | Nine beads | Nine fingers | Nine |

## Practice



|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Colour any nine flowers.  
Suggest one more way of colouring.



Draw the tail to the kites with number nine.

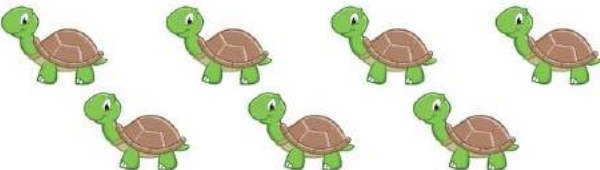



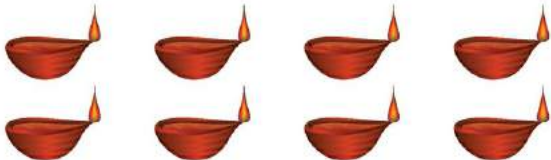






## Pleasure time



Count the pictures and circle their correct number.

|   |   |   |   |
|---|---|---|---|
|    | 8 | 7 | 9 |
|    | 5 | 6 | 8 |
|   | 2 | 3 | 4 |
|  | 6 | 7 | 5 |
|  | 5 | 4 | 8 |
|  | 2 | 1 | 3 |
|  | 2 | 3 | 1 |



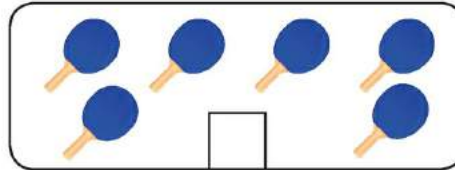
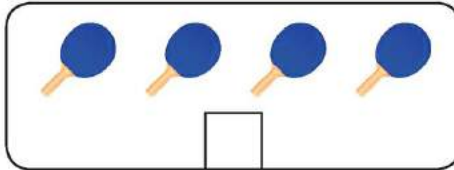
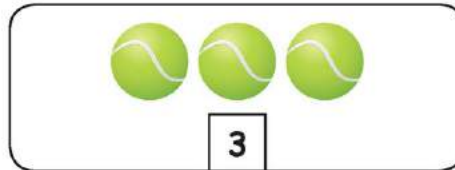
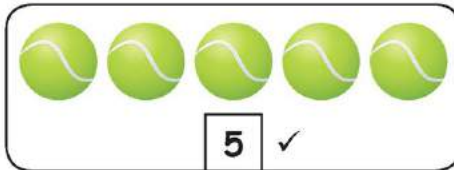
## Comparison

### Bigger Number - Smaller Number

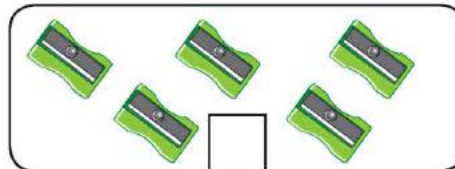
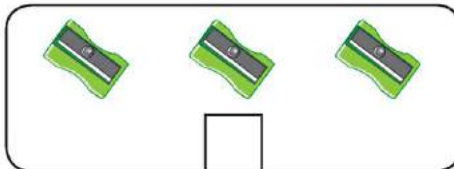
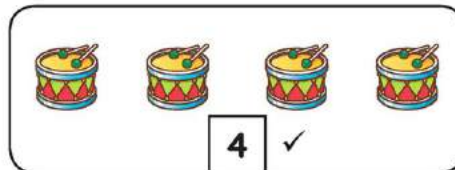
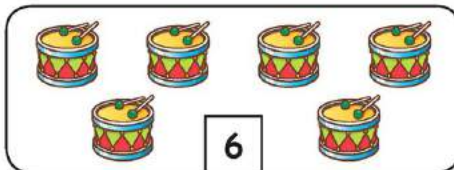
#### Practice



Write the Count in  and Tick (✓) the bigger number



Write the Count in  and Tick (✓) the smaller number



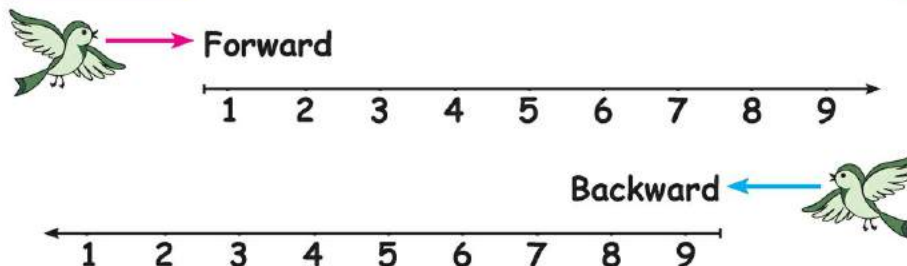
#### Pleasure time



- Circle the Bigger number:  
a) 7 , ⑧ b) 5 , 6 c) 9 , 4 d) 1 , 3
- Circle the Smaller number:  
a) ① , 5 b) 6 , 4 c) 8 , 3 d) 7 , 9

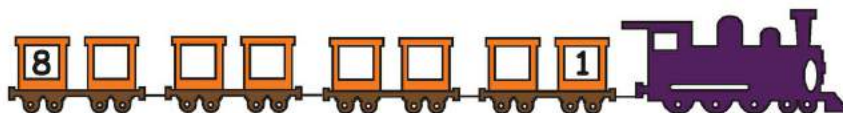
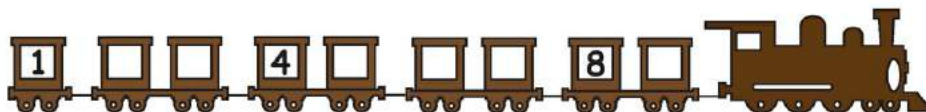
## Forward - Backward

### Learn



### Try this

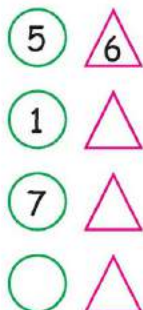
Fill up the missing numbers.



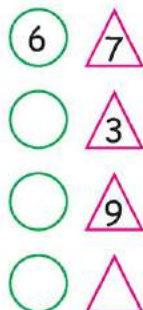
What are the differences between the numbers that you have filled in the trains above?

### Practice

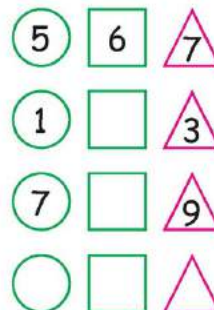
#### After



#### Before



#### Between



## Ordinal numbers



### Travel through



Look at the Fruit Babies on the stage



### Oral Questions:

1. Name the fruit-baby standing in first position.
2.  is standing in the \_\_\_\_\_ position.
3. Name the fruit-baby standing in the 7th position.
4.  is standing in the \_\_\_\_\_ position.
5. Which fruit-baby do you like the most? Why?

### Practice



3rd:



8th:



6th:



7th:

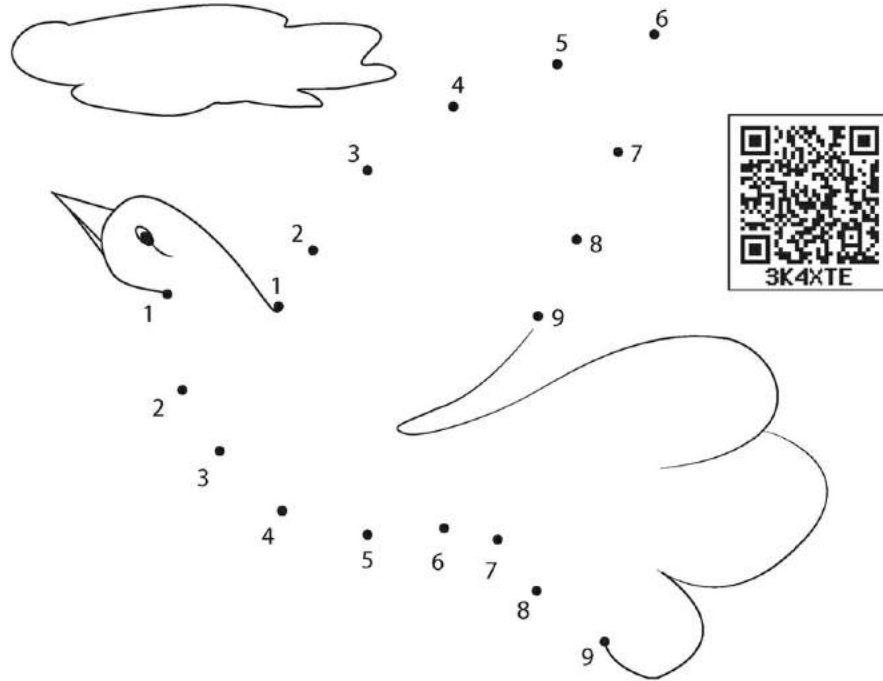




## Pleasure time



1. Join the dots in order and colour the picture.



2. Form the picture like  using bindhis.

4 bindhis 

3 bindhis 

5 bindhis 

9 bindhis 

7 bindhis 



3. Frame the numbers 1 to 9 by using match sticks.

The number 2 can be framed as . Try other numbers.

4. Colour the boxes with nine different colours.

| Postion | 1 <sup>st</sup> | 2 <sup>nd</sup> | 3 <sup>rd</sup> | 4 <sup>th</sup> | 5 <sup>th</sup> | 6 <sup>th</sup> | 7 <sup>th</sup> | 8 <sup>th</sup> | 9 <sup>th</sup> |
|---------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Colours |                 |                 |                 |                 |                 |                 |                 |                 |                 |

Colour the boxes with the specified position.

9<sup>th</sup>  2<sup>nd</sup>  8<sup>th</sup>  1<sup>st</sup>  4<sup>th</sup>

## Slide and Ladder

### Game



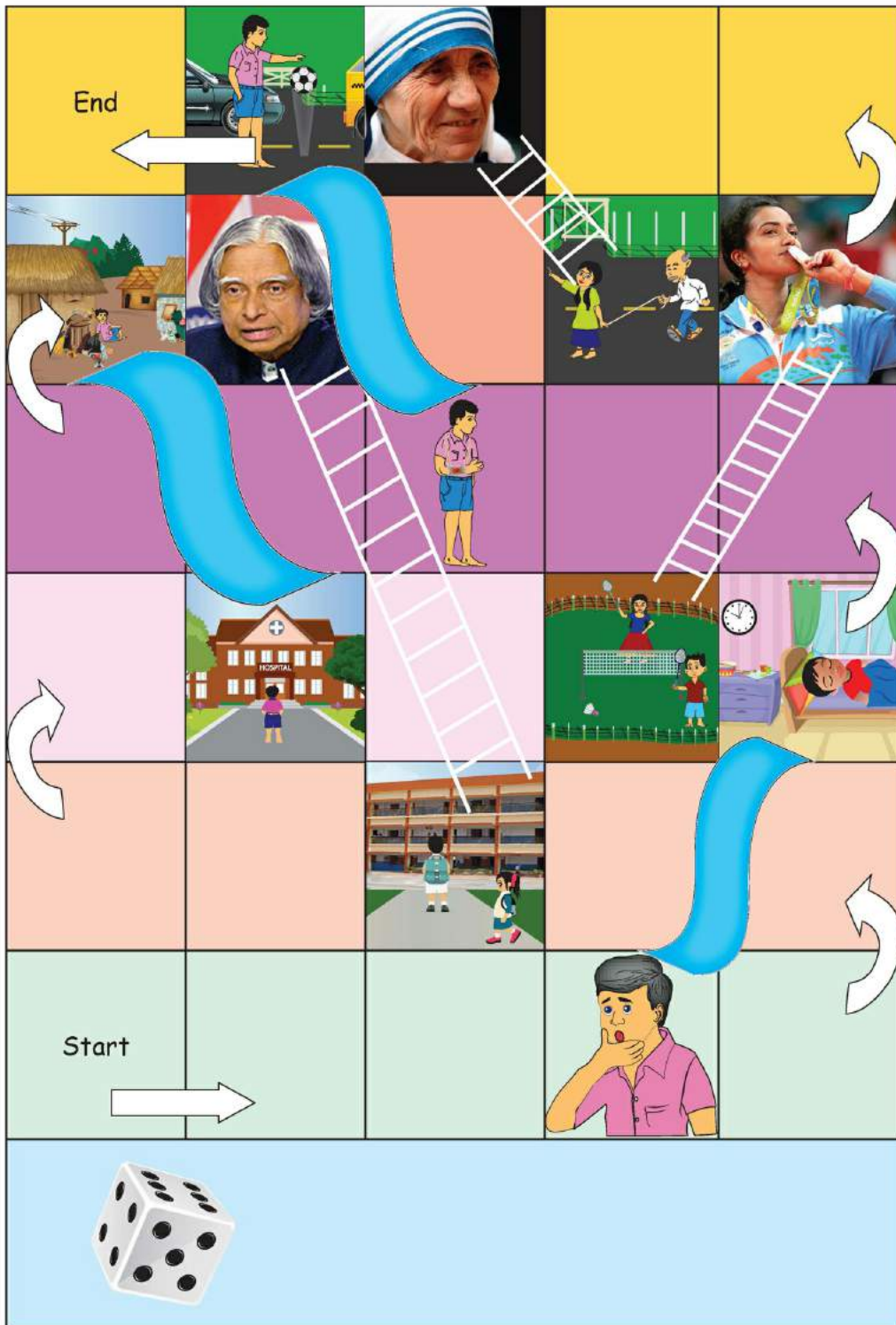
**Objective:**

1. To be familiar with numbers from 1 to 6.
2. To inculcate moral values.

**Materials required:** A dice, different coloured buttons.

**Method:**

1. Students can play alone or in a group of two or more.
2. Each player should throw the dice and move their button in the game chart from their starting point.
3. Throwing the dice should be done in rotation.
4. Whenever they reach the bottom of the ladder, they should climb up and when they reach the head of the slide, they should come down to the bottom of the slide.
5. The player who reaches the end will be the winner.



## 2.2 Addition



### Keywords

Add

Total

Altogether

More

### Travel through



### Teacher's note

Teacher can extend the story up to number 9.



## Combine together

### Learn



Addition means combining or putting things together.





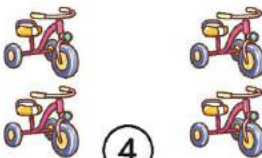




+ is the sign for addition.

|   |     |   |       |   |
|---|-----|---|-------|---|
|  | and |  | makes |  |
|  | +   |  | =     |   |

### Practice



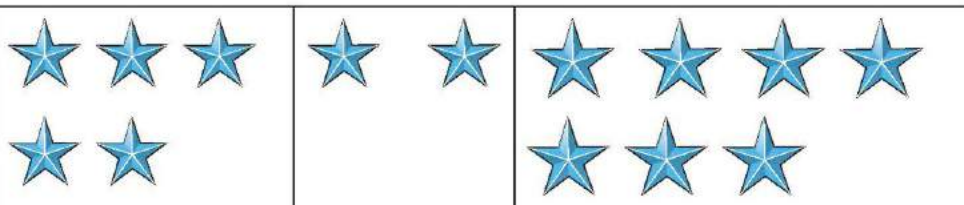
## Count and Draw together

|   |                      |   |   |   |
|---|----------------------|---|---|---|
| <br>(3)                  | +                    | <br>(1)                  | = | <br>(4) |
| <br>(4)                  | <input type="text"/> | <br>(1)                  | = | <input type="text"/>  |
| <br><input type="text"/> | <input type="text"/> | <br><input type="text"/> | = | <input type="text"/>  |

# Practice



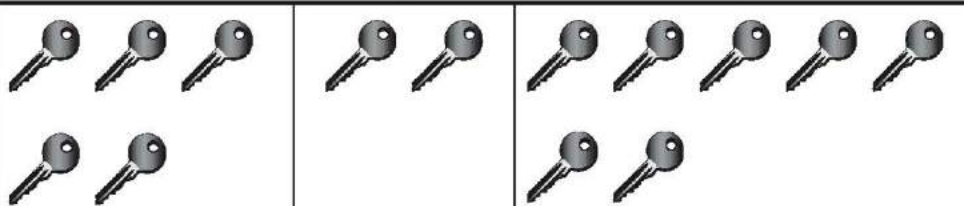
Add and write



$$\textcircled{5} + \textcircled{2} = \textcircled{7}$$



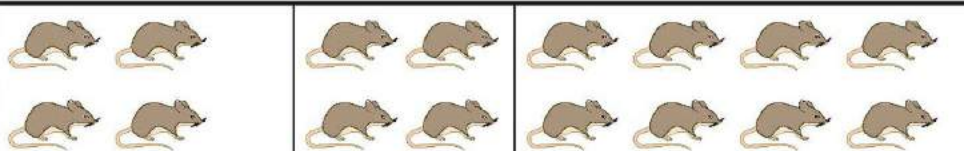
$$\bigcirc + \bigcirc = \bigcirc$$



$$\bigcirc + \bigcirc = \bigcirc$$



$$\bigcirc + \bigcirc = \bigcirc$$

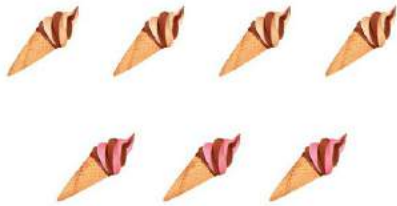


$$\bigcirc + \bigcirc = \bigcirc$$

## Practice

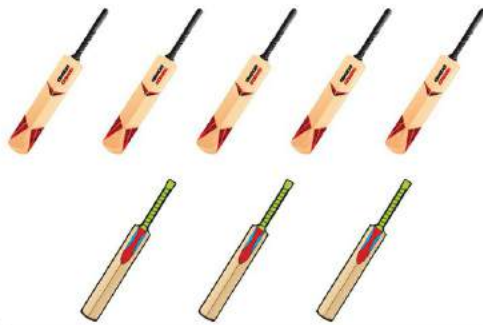


Write addition facts



$$4 + 3 = 7$$

$$3 + 4 = 7$$



## Think like a mathematician



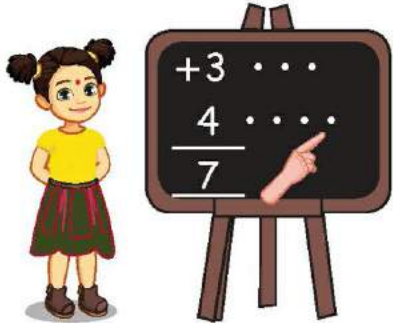
Addition facts of 3  
 $2 + 1$  and  $1 + 2$

Find all addition facts of 5.  
Find all addition facts of 6.


## Learn



### Addition using beads



$$\begin{array}{r} 5 \\ + 1 \\ \hline 6 \end{array}$$



## Practice



|   |   |
|---|---|
| $\begin{array}{r} 2 \\ + 3 \\ \hline \\ \hline \end{array}$ | $\begin{array}{r} 6 \\ + 3 \\ \hline \\ \hline \end{array}$ |
| $\begin{array}{r} 4 \\ + 5 \\ \hline \\ \hline \end{array}$ | $\begin{array}{r} 3 \\ + 3 \\ \hline \\ \hline \end{array}$ |
| $\begin{array}{r} 1 \\ + 7 \\ \hline \\ \hline \end{array}$ | $\begin{array}{r} 3 \\ + 4 \\ \hline \\ \hline \end{array}$ |
| $\begin{array}{r} 4 \\ + 2 \\ \hline \\ \hline \end{array}$ | $\begin{array}{r} 7 \\ + 2 \\ \hline \\ \hline \end{array}$ |



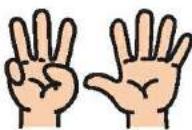
## Learn



### Addition using fingers



$$3 + 5$$



$$\begin{array}{r} 3 \\ + 5 \\ \hline \end{array}$$

8



## Practice



$$2 + 3 = \boxed{5}$$

$$\begin{array}{r} 2 \\ + 3 \\ \hline 5 \end{array}$$

$$4 + 4 = \boxed{\phantom{00}}$$

$$\begin{array}{r} 4 \\ + 4 \\ \hline \end{array}$$

$$5 + 1 = \boxed{\phantom{00}}$$

$$\begin{array}{r} 5 \\ + 1 \\ \hline \end{array}$$

$$2 + 7 = \boxed{\phantom{00}}$$

$$\begin{array}{r} 2 \\ + 7 \\ \hline \end{array}$$

## Pleasure time



Add and tick (✓) the correct answer.

|         |   |   |   |
|---------|---|---|---|
| $2 + 3$ | 3 | 5 | 6 |
| $1 + 5$ | 4 | 1 | 6 |
| $3 + 4$ | 3 | 7 | 4 |
| $7 + 2$ | 9 | 1 | 7 |
| $4 + 4$ | 7 | 4 | 8 |
| $6 + 3$ | 6 | 9 | 3 |

Colour two numbers which make 8.

|   |   |   |   |   |
|---|---|---|---|---|
| 4 | 1 | 3 | 7 | 6 |
| 1 | 2 | 6 | 5 | 4 |
| 9 | 2 | 3 | 7 | 5 |

Colour two numbers which make 9 in different ways.

|   |   |   |   |   |
|---|---|---|---|---|
| 4 | 1 | 5 | 3 | 8 |
| 3 | 4 | 6 | 2 | 7 |



## Try this

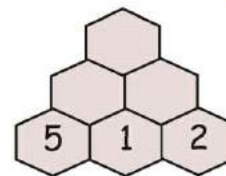
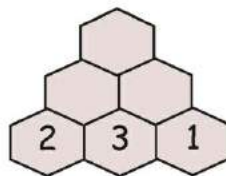
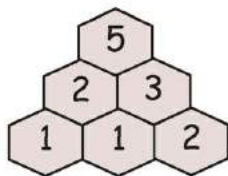


Circle the numbers which give a sum of 9.

|   |   |   |   |
|---|---|---|---|
| 1 | 8 | 2 | 6 |
| 4 | 4 | 1 | 9 |
| 6 | 5 | 7 | 2 |
| 3 | 6 | 9 | 1 |

## Mind math

Look at the first one and do the rest.



Mind math (To be done orally).



1. Akilan has 4 pencils. Mukilan gives him 2 more. How many pencils does he have **totally**?
2. There are 5 flowers in a plant and 3 flowers are there in another plant. How many flowers are there **altogether**?
3. Ruby's father gave her 6 chocolates and her mother gave 2 chocolates for her birthday. **Totally** how many chocolates does Ruby have in her hand?

### Think like a mathematician



1. Pick a pair from the above numbers. Write addition fact for it.

2. Pick another pair of numbers. Write addition fact for it.

3. Keep doing it. How many different answers will you get?



## 2.3 Subtraction

### Travel through

#### Keywords

Take away

Left

Subtract

Difference

Less



#### Teacher's note

Teacher narrates the above pictures for enhancing the vocabularies such as **difference**, **less**, **move away**, **go away** to denote subtraction.

## Take away

### Learn



Subtraction means to 'take away'.



From



take away



left

### Practice



From



take away



left



From



Move away



left



From



go away



left



From



fly away



left

## Subtract

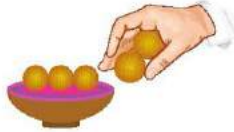
### Learn

' - ' is the sign of subtraction.



5

-



2

=



3

### Practice



-



=



-



=



-



=



-



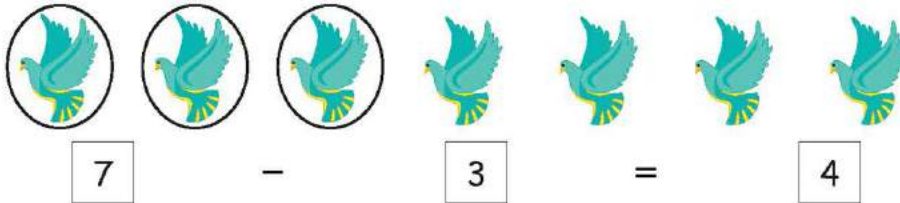
=



## Learn



Complete the subtraction fact by circling.



7

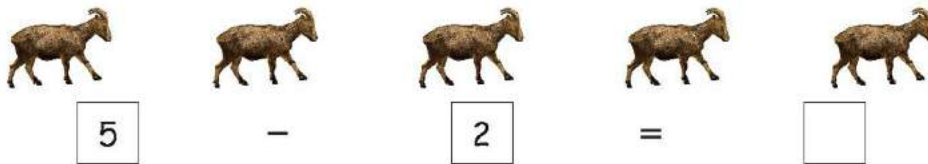
−

3

=

4

## Practice



5

−

2

=



6

−

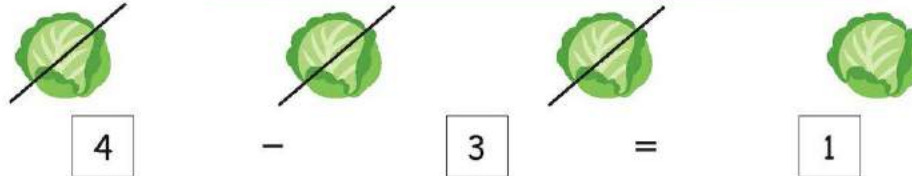
4

=

## Learn



Complete the subtraction fact by striking.



4

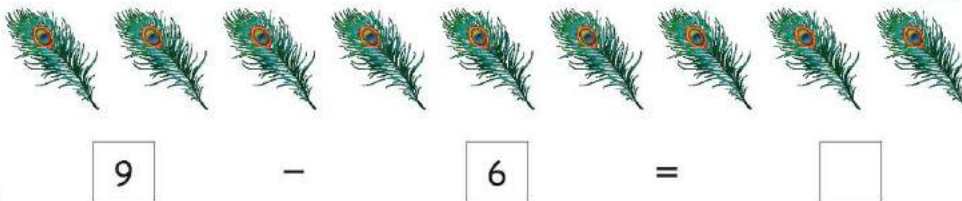
−

3

=

1

## Practice



9

−

6

=



## Subtraction using lines

### Learn

$$\begin{array}{r} 3 \\ - 2 \\ \hline \end{array} = \boxed{1}$$

$$\begin{array}{r} 3 \\ - 2 \\ \hline 1 \end{array}$$



### Practice

|   |   |   |
|---|---|---|
| $\begin{array}{r} 6 \\ - 1 \\ \hline \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ - 2 \\ \hline \\ \hline \end{array}$ | $\begin{array}{r} 9 \\ - 4 \\ \hline \\ \hline \end{array}$ |
|---|---|---|



## Subtraction using beads

### Learn

$$\begin{array}{r} 5 \\ - 1 \\ \hline \end{array} = \boxed{4}$$

$$\begin{array}{r} 5 \\ - 1 \\ \hline 4 \end{array}$$



### Practice

|   |   |   |
|---|---|---|
| $\begin{array}{r} 6 \\ - 1 \\ \hline \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ - 2 \\ \hline \\ \hline \end{array}$ | $\begin{array}{r} 9 \\ - 4 \\ \hline \\ \hline \end{array}$ |
|---|---|---|



### Try this

Create your own subtraction fact

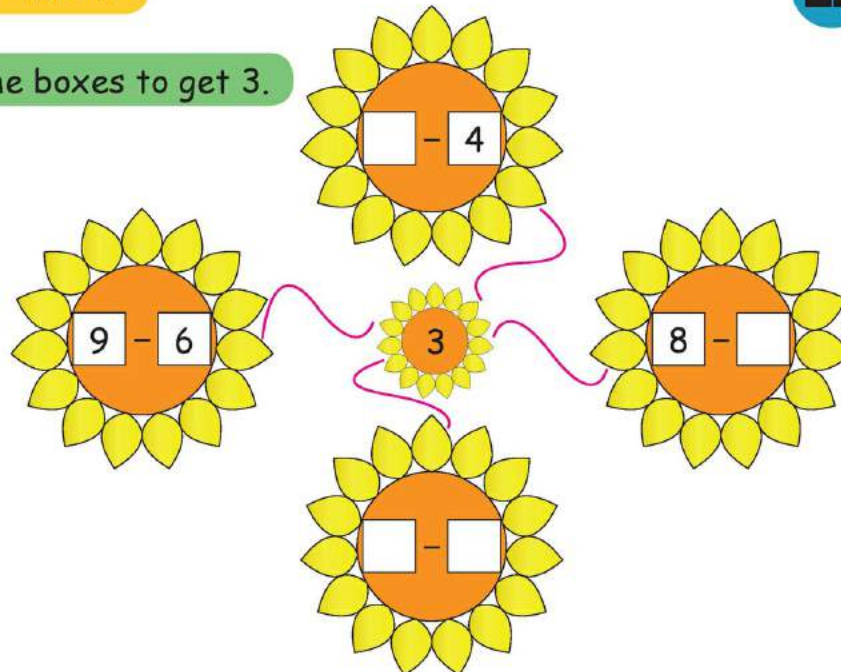
$$\boxed{\phantom{0}} - \boxed{\phantom{0}} = \boxed{\phantom{0}}$$



### Mind math



Fill the boxes to get 3.



### Mind math (Oral)



1. Pari bought 7 bananas. His brother ate 2 of them. How many bananas are left with Pari?
2. Mani bought 6 eggs. 3 of them were broken. How many eggs are left?
3. Thendral is 8 years old. Her sister Nila is 2 years younger than her. How old is Nila?

### Think like a mathematician



How can I fill these boxes using the numbers 8, 5, 3?

$$\square - \square = \square$$

### Pleasure time



Fill the circle by  $+$  or  $-$



|   |     |   |   |   |
|---|-----|---|---|---|
| 3 | $+$ | 2 | = | 5 |
| 4 |     | 2 | = | 2 |
| 8 |     | 3 | = | 5 |

|   |  |   |   |   |
|---|--|---|---|---|
| 3 |  | 3 | = | 6 |
| 9 |  | 2 | = | 7 |
| 2 |  | 6 | = | 8 |

### Try this



I am more than 5 and less than 8. I am not 7. Who am I ?

### Activity



**Aim:** Creating subtraction stories.

**Things needed:** Flash card with subtraction facts like

$$5 - 2$$

$$4 - 1$$

$$7 - 3$$

$$9 - 4$$

**Procedure:**

1. Divide the class into two groups.
2. Let the students from one group pick up the card from the deck and show it to the other group.
3. Students from that group have to make a subtraction story for that card.
4. This activity can be interchanged between the groups and continued.

#### Teacher's note

Teacher can encourage the children to tell stories on addition and subtraction on their own. This encourages mathematical communication in the classroom.

## 2.4 Zero

### Travel through



I am the Hero My name is Zero

Three bits of paper lying on the floor,  
pick one up, put it in the bin;  
Look at the floor now, two are left.

Two bits of paper lying on the floor,  
pick one up, put it in the bin;  
Look at the floor now, one is left.

One bit of paper lying on the floor,  
pick it up, put it in the bin;  
Look at the floor now, there is no paper left.

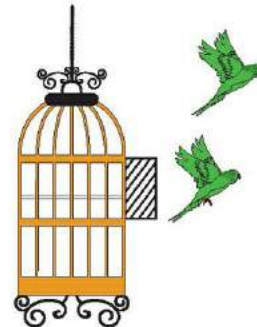
### Learn



2 parrots  
in the cage.



1 parrot  
in the cage.



0 parrot  
in the cage.

0 is also a number.

### Teacher's note

Teacher can use the spindle board of SLM kit for enhancing the concept of Zero.



## Practice



|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

## Pleasure time



1. Count and write the number of butterflies.

|   |  |  |  |
|---|--|--|--|
|   |  |  |  |
| 3 |  |  |  |

2. Count and write the number of pencils.

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|  |  |  |  |

3. Count and write the number of tomatoes.

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|  |  |  |  |

## Unit 3

## Patterns

### Keywords

Pattern

Sound

Colour

### 3.1 Patterns in sounds

#### Travel through



#### On my way to school !

Mathi is going to school. On the way, she hears many sounds. She is enjoying the patterns in it. Let us go along with her and enjoy it.



#### Teacher's note

- Enact the situation in the classroom by producing the above sounds.
- Encourage the children to mimic some other sounds that they have heard in their real life situations. Example: Sounds of birds, animals, vehicles, etc.,

## I am happy !

### Learn



Clap, clap, clap  
I am happy at my home;  
So, I clap, clap, clap.



Snap, snap, snap  
I am happy at my school;  
So, I snap, snap, snap.

Stamp, stamp, stamp  
I am happy at my class;  
So I stamp, stamp, stamp.



Tap, tap, tap  
I am happy everywhere;  
So I tap, tap, tap.



### Teacher's note

- Sing the song by making the sounds.
- Further in the next rounds, while singing, the teacher should make the sounds instead of using the words clap, snap, stamp, and tap. This will add flavour to the sound pattern.

### Practice

#### Let us clap

Teacher initiates the activity by clapping in a definite pattern.

- \* 1clap - 1clap - 1clap,...
- \* 2claps - 2 claps - 2 claps,...
- \* 1clap - 1clap - 3 claps, 1clap - 1clap - 3 claps, ...
- \* 3 claps - 3 claps - 1clap - 1clap - 1clap, ...



## Try this

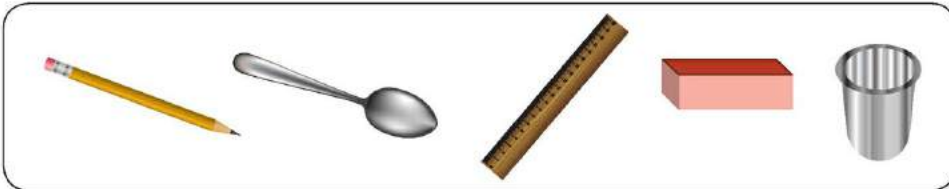


Meow and Bow-Bow are friends. They are meeting after a longtime. Think how their conversation would be like!



## Activity






Act and enjoy



**Aim:** Creating patterns in sounds.

**Things needed:** Pencil, steel spoon, plastic scale, wooden duster, steel tumbler.

**Procedure:** By gently tapping these, make different sound patterns and enjoy. Follow the patterns given below. Try some other patterns also.

|                |  |  |  |  |  |
|----------------|---|---|---|---|---|
| Number of taps | 1   | 1   | 1   | 1   | 1   |
|                | 2   | 2   | 2   | 2   | 2   |
|                | 1   | 2   | 1   | 2   | 1   |



30XVZ3

Oh! sound patterns are everywhere!  
Where do you hear such patterns in sound?  
Share it!





## 3.2 Patterns in colour



Travel through



Colourful Garden



**Speak out**

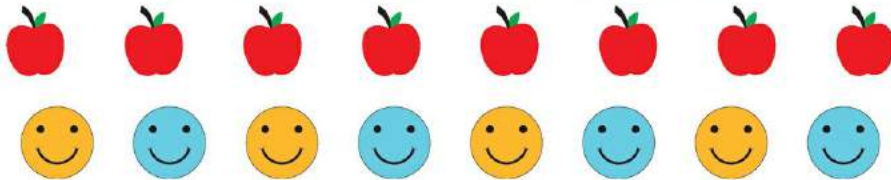
- Look at the trees and the plants . How are they arranged?
- Look at the colours of the slides. What is the pattern here?
- Look at the colourful balloons. What is the pattern in it?
- Do you see any other colourful patterns in the garden?  
Share it in the class with your friends.



## Learn



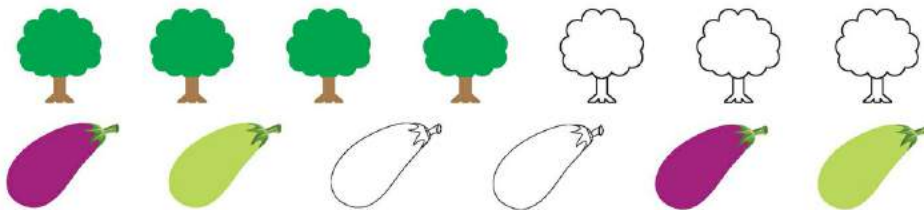
Observe and identify the pattern.



## Practice



Colour and complete the pattern.



## Pleasure time



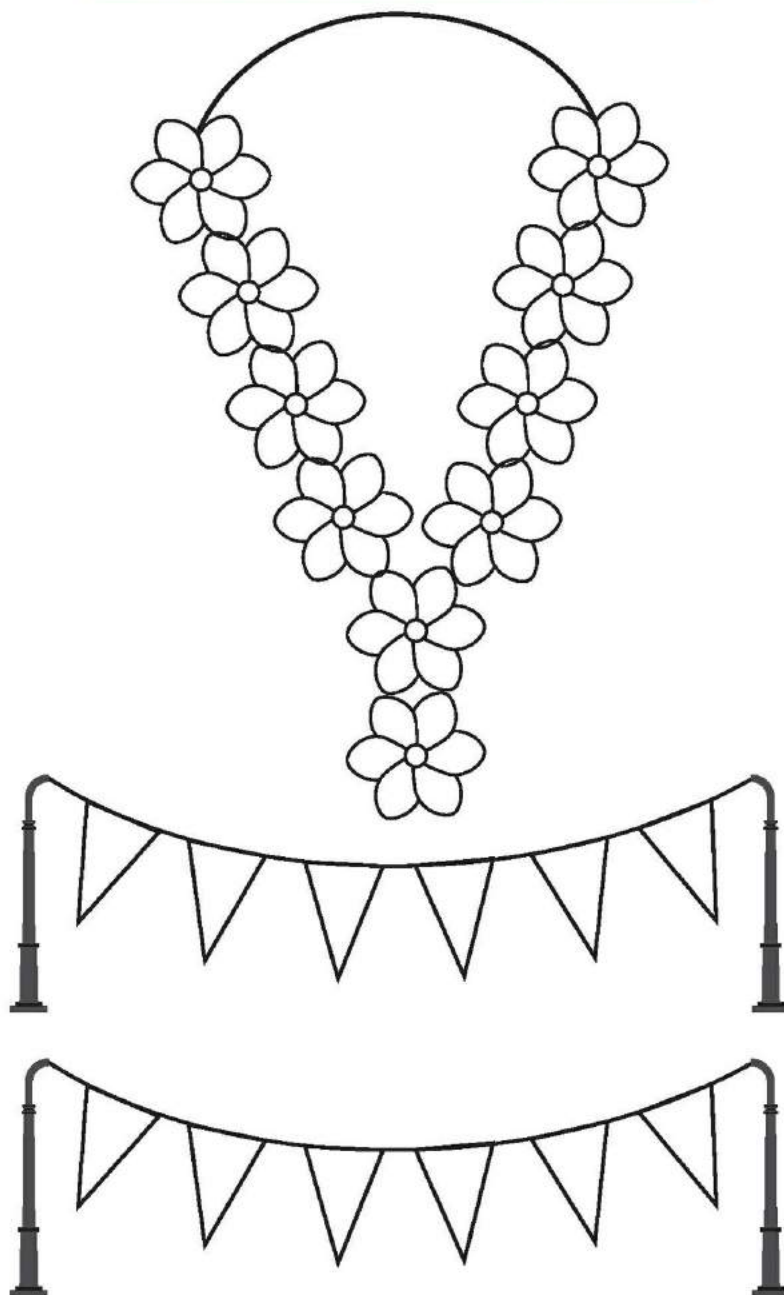
Observe the pattern and choose the correct one by ticking it.

|  |                          |       |
|--|--------------------------|-------|
|  |                          | _____ |
|  | <input type="checkbox"/> |       |
|  |                          | _____ |
|  | <input type="checkbox"/> |       |

## Activity



Make a colourful Pattern on your own.



## Unit 4 Information Processing

### 4.1 Systematic listing

#### Keywords

Information  
Data  
List

Organise  
Group  
Collect


























#### Travel through

Colourful fishes



#### Learn

Count the number of fishes of each kind in the tank and colour them below.

|   |   |   |  |   |
|---|---|---|--|---|
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |



**Answer the following from the picture:**

1. Number of children playing seven shots \_\_\_\_\_
2. Number of electric posts \_\_\_\_\_
3. Number of children sitting under the tree \_\_\_\_\_
4. Number of crows \_\_\_\_\_
5. If all the children join together in the train game, then how many will be there in the game?
6. Tell the other games that you play.



# Practice



## Birthday celebration



Look at the picture. Count and write.

|  |   |  |   |
|--|---|--|---|
|  | 2 |  | 3 |
|  |   |  |   |
|  |   |  |   |
|  |   |  |   |









## 4.2 Organising information

### Learn



Know your relatives.


| Relationship   | Number of relatives |
|--|---------------------|
|  Brother        |                     |
|  Sister         |                     |
|  Grand Father  |                     |
|  Grand Mother |                     |
|  Uncle        |                     |
|  Aunt         |                     |







## Activity



### Means of transport

#### Procedure:

1. Divide the class into small groups.
2. Discuss among the group members how each child comes to school?
3. Ask them to complete the table by marking the symbol "●" in the table.
4. Example: If 3 students come to school by bicycle, then mark the symbol "●" 3 times against the .

| How do they come to school?   | "●" denoting number of students | Total |
|---|---------------------------------|-------|
|  |                                 |       |
|  |                                 |       |
|  |                                 |       |
|  |                                 |       |
|  |                                 |       |
|  |                                 |       |

Answer the following based on the data collected.



1. How do you come to school ? Tick ( ✓ ) it.

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

2. How many friends in your group come to school by walk?

3. Total number of members in your group .



4. Tick ( ✓ ) the means of transport which is used most in your group?

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

5. Tick ( ✓ ) the means of transport which is used least in your group?

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

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