1

Objectives

- To develop understanding of mathematics in children by interesting method.
- Do not take the children to the world of mathematics. But bring the mathematics in children's life.
- Understanding of counting, speaking, reading and writing the number upto 9.
- To enable the children to campare the digits.
  To enable the children to understand counting, backward counting of
- numbers upto 9 and word problems.
  To split a number into different pairs of numbers as addition and subtraciton.

Do you remember?

- How many bags do you have ?
- How many suns are there in the sky ?
- How many heads do you have ?
- How many hands do you have ?
- How many eyes do you have ?
- How many bulbs are there in your classroom ?
- How many fans are there in your classroom ?
- How many windows are there in your classroom ?

- How many rooms are there in your school ?
- How many brothers and sisters are you all ?
- How many members are there in your family ?
- How many legs does a chair have ?
- How many fingers do you have on each hand ?
- How many fingers do you have on both hands ?
- How many trees are there in your school ?

One Two

Buckle my shoes

Three Four

Shut the door

Five Six

Pick up the sticks

Seven Eight

Lay them straight
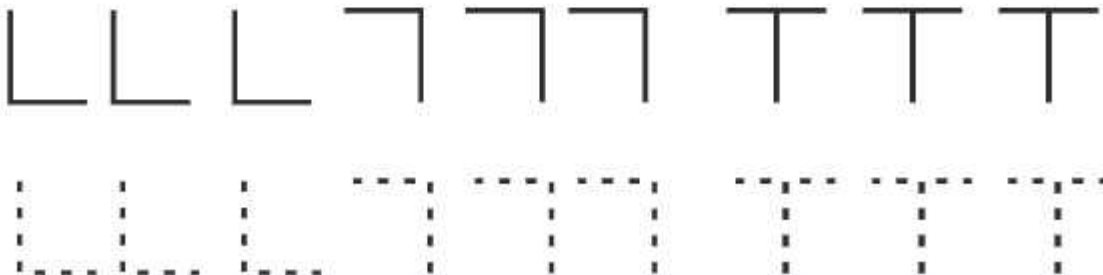
Nine Ten

A big fat hen

Draw the raindrops, one by one starting from the top till the bottom.

Make a paper boat and try to float it on water, Draw water beneath the boat.

Let's join water and rain drops.

Note Before telling the story while teaching numbers, the teacher will draw rain-drops and water flowing under the boat.

Make tail of the cat with the help of your pencil using circular motion.

Help the crow to reach its nest.

Note The teachers will encourage the students to complete the page with both the activities by using story-telling method and make students do this on their note-books.

One One One
Our nose is One

Colour it

1

Two Two Two
Our eyes are two

Colour it

2

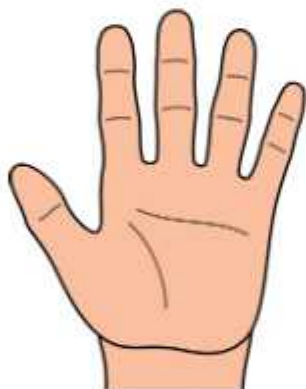**Three Three Three**
Blades of fan are three

Colour it

3
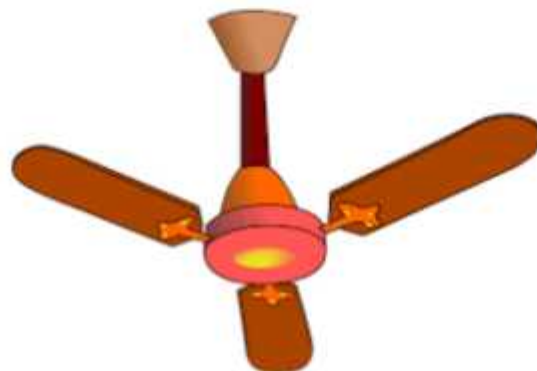
Four Four Four
Legs of chair are four

Colour it

4
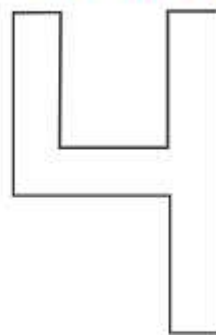
Five Five Five

Fingers of our hand are five

Colour it

5

Colour these

1

2

3

4

5

Count the fingers of your one hand.

How many fingers do you have on each hand ?

Anveet

Let us learn counting with other objects.

5

Anveet

What is this ?

1

1

Aslam

1
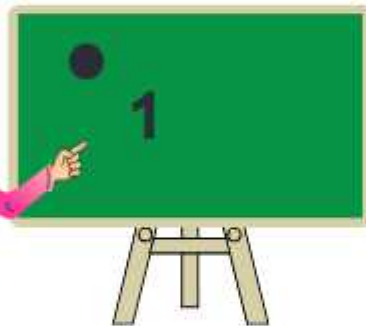
Which digit is there on this card ?

1

Chintu

Show 1 on the number strip

1	2	3	4	5	6	7	8	9
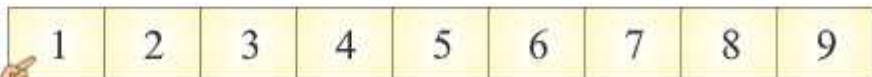
Note The teacher will tell about numbers with the help of fingers, solid objects, maan cards and number strip.

With fingers	With dots	With objects	With maan cards
✌️	• •	✏️✏️	2

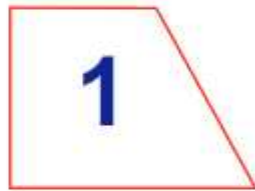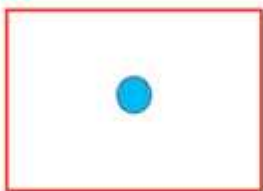|			
☝️	•	📗	1
✌️	• •	✏️✏️	2
🖖	• • •	📕📕📕	3
✋	• • • •	🪑🪑🪑🪑	4
🖐️	• • • • •	🕯️🕯️🕯️🕯️🕯️	5
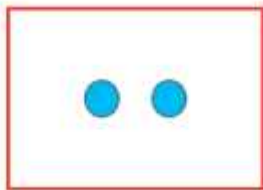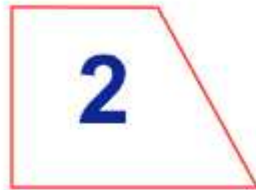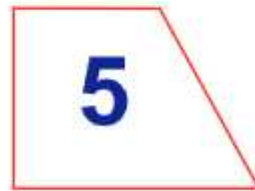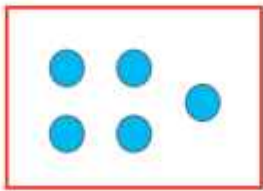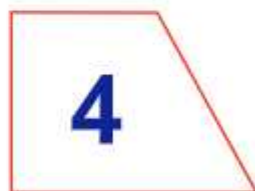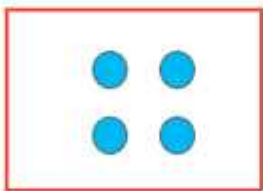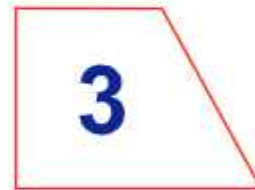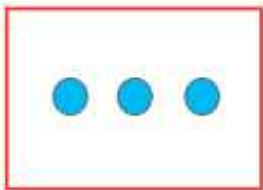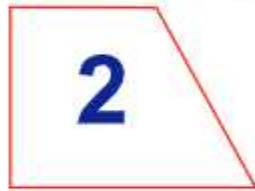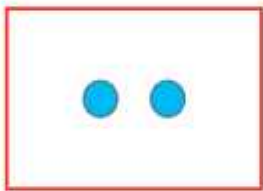
Note The teacher will tell the students to count different things using dots and fingers of their hands.

Take a jump

| 1 | 2 | 3 | 4 | 5 |

Take a jump and bring the card

Stand in order according to numbers

Count the balloons, recognize and match with the numbers

5

3

1

2

4

Draw objects of your choice

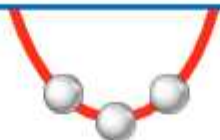| 4	3	5	1	2

Note The teacher will motivate the students to draw the objects, of their own choice.

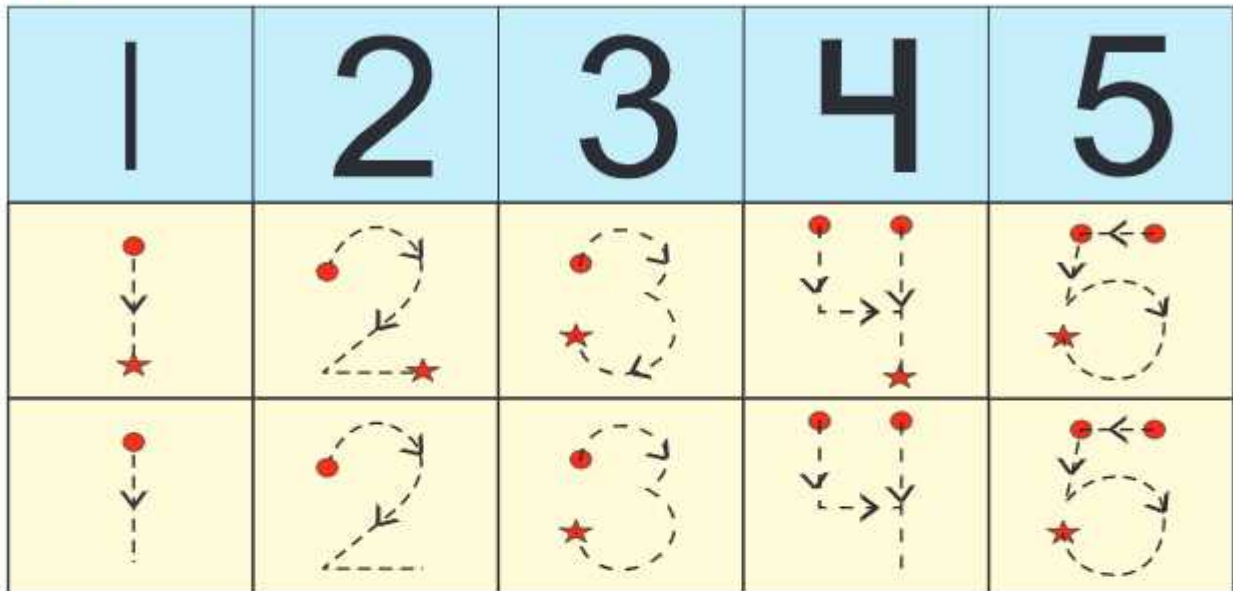**Put bead/beads in the thread according to the dots shown on the face of the dice and match them with the digits.**

🎲	🔴⚪⚪⚪	5
🎲		3
🎲		1
🎲		2
🎲		4

Draw flowers in the pots as described :

3   5   2

4   1

Start from the dot and move towards the star to get beautiful numbers.

1	2	3	4	5

Write number 1 to 5
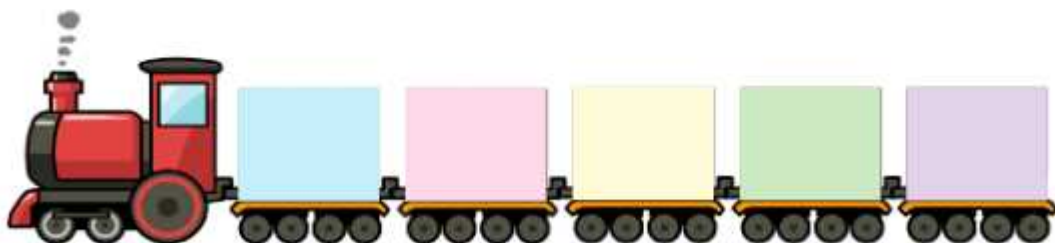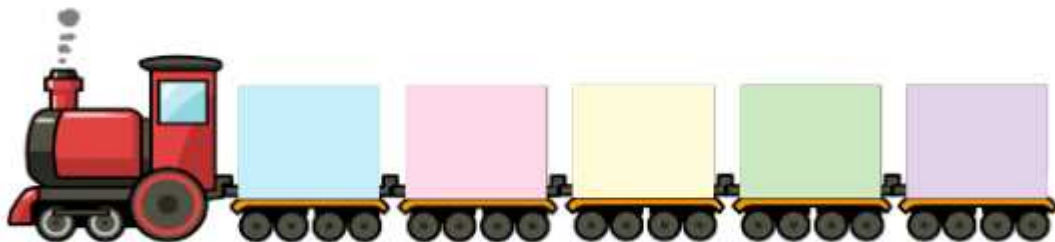
The teacher will tell the students to do practice of these numbers in their note book.

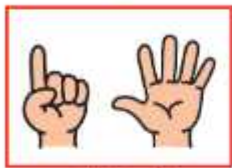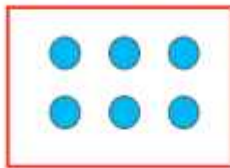**Count the sea creatures and write the number in the mentioned box.**

Oral knowledge of number 6 to 9

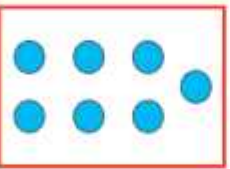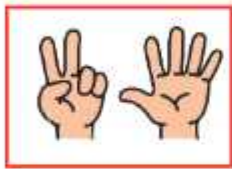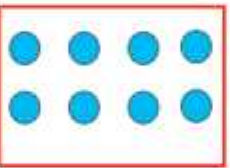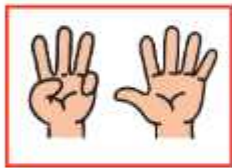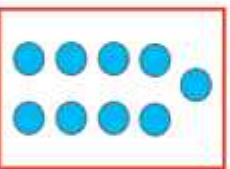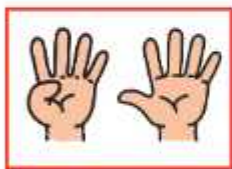|			
With fingers	With dots	With objects	With maan cards
			6
			7
			8
			9

Recognition of numbers 1 to 9

1

2

3

4

5

6

7

8

9
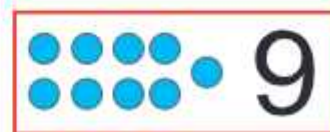
Note When the student starts counting objects from 1 to 5 and able to recognise and write the numbers from 1-5, teach them to count the numbers from 6 to 9 with the help of objects, dot cards. They can also use maan cards and number line while counting.
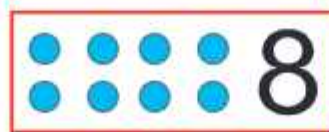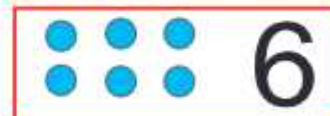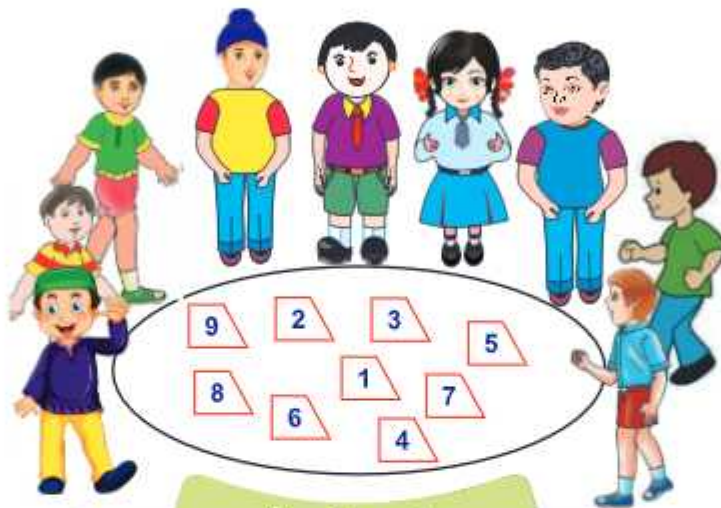
Take a Jump

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

Take a jump and bring the card

**Stand in order according to numbers**

Note

- The teacher will speak any of the number from 1 to 9 and ask a student to jump on that number.
- Make a circle of the students and ask them to bring a maan card 1 to 9 those are lying inside the circle.
- The teacher will distribute maan cards to the students from 1 to 9 and ask them to stand in order according to the maan card.
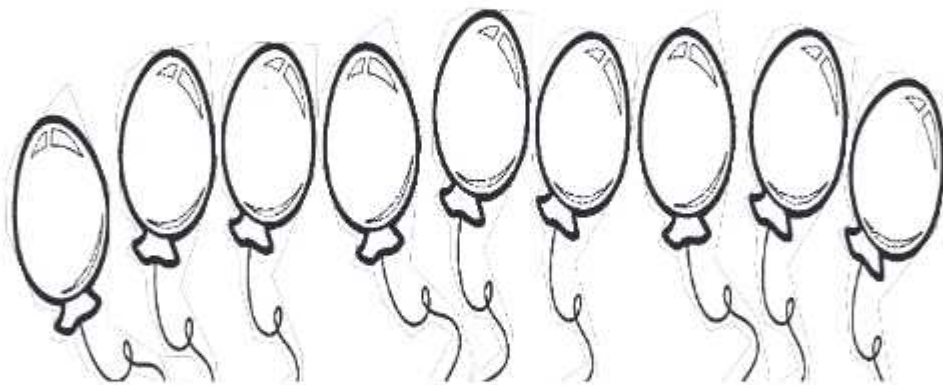
1. Fill colour in 6 apples :
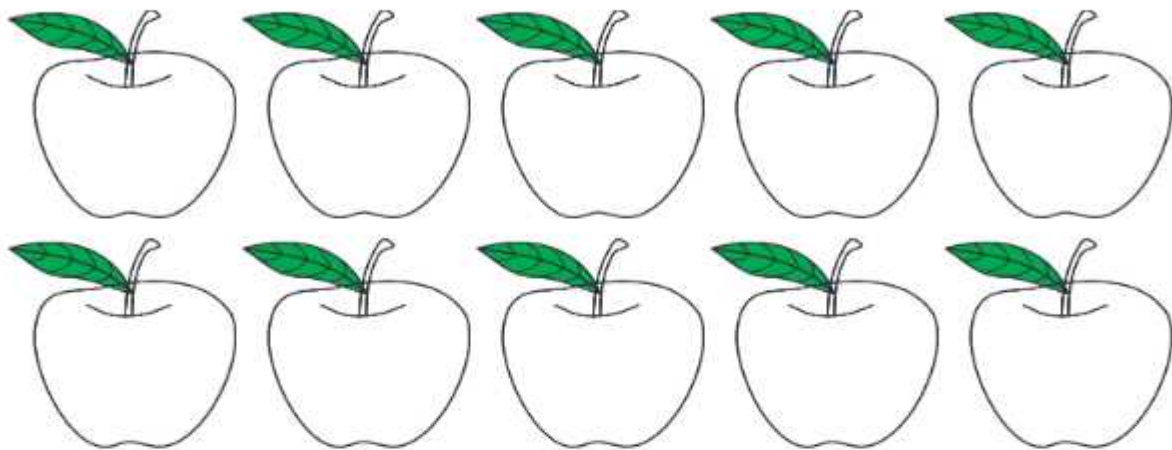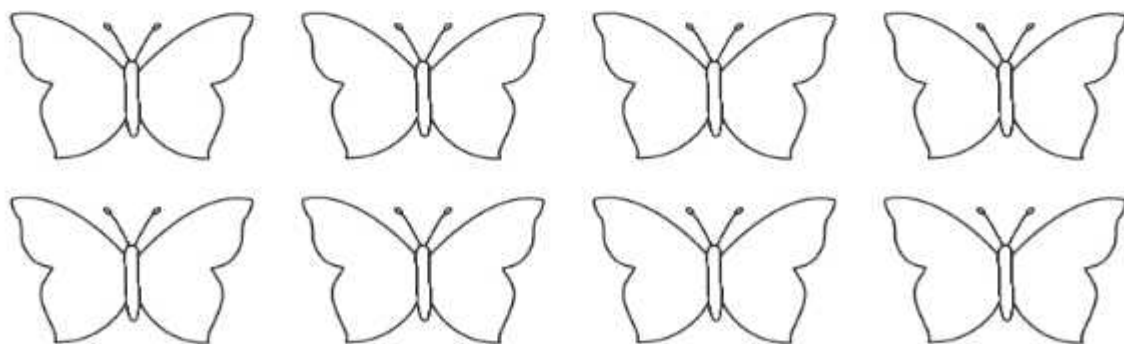

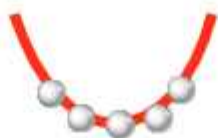### 2. Fill colour in 8 balloons :

3. Fill colour in 7 butterflies :

Note The teacher will tell the students to pick things from a box containing different things like 8 leaves, 6 ice-cream sticks, 4 beads etc. from the

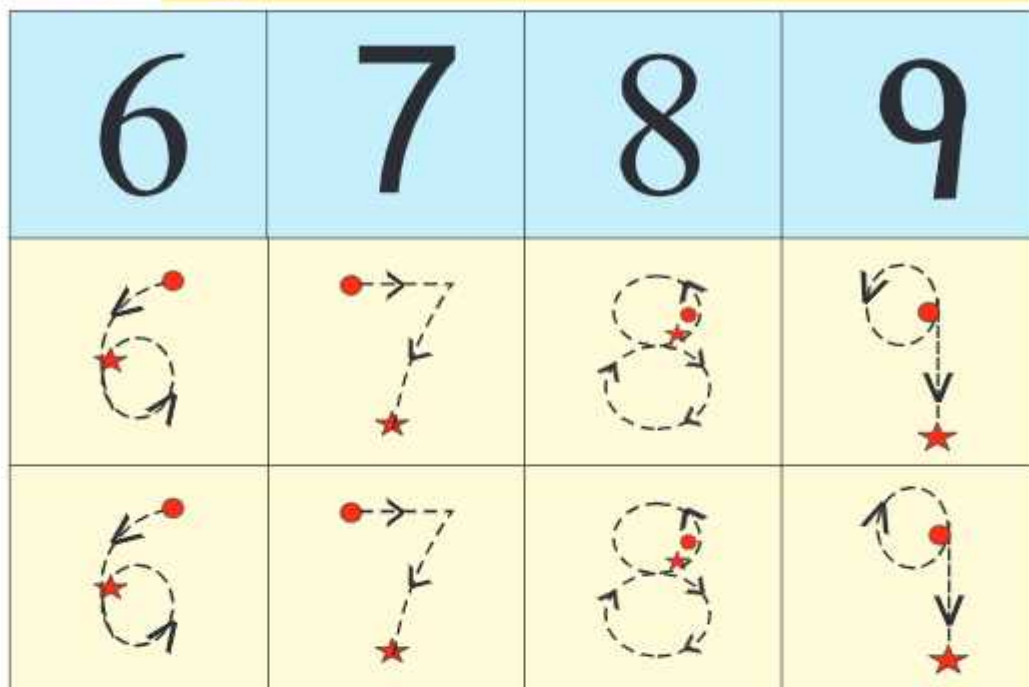**4.** **Put beads in the thread according to dots are shown on the face of dice and match them with the digits.**
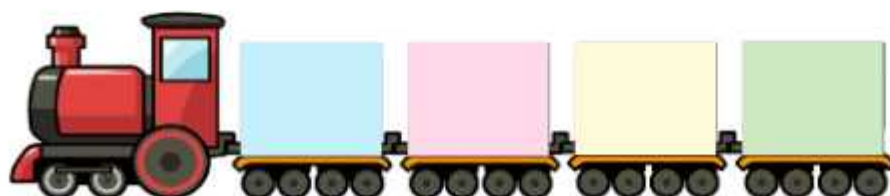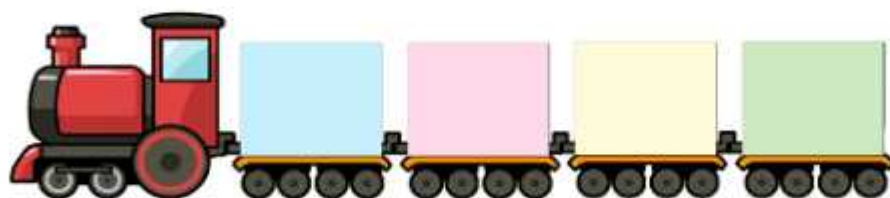
Start from the dot and move towards the star to get beautiful numbers.

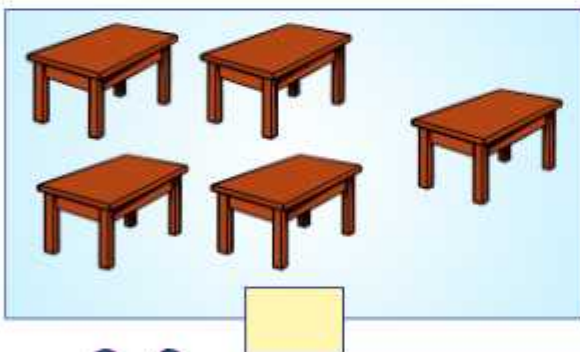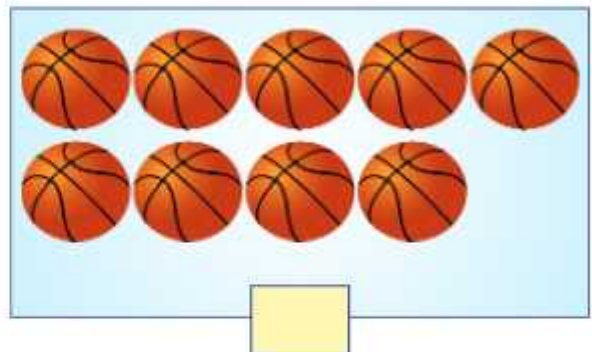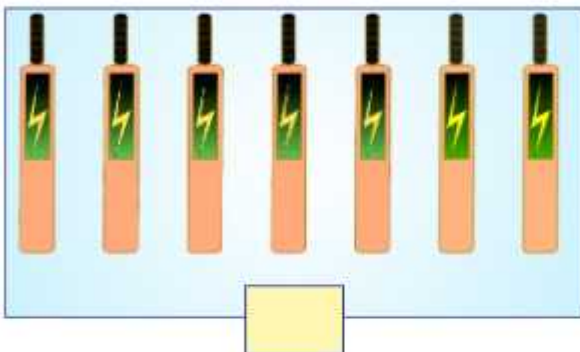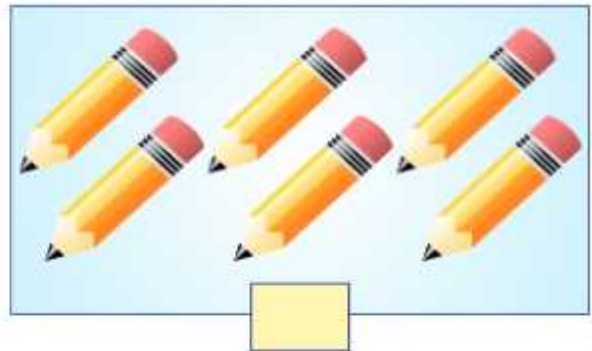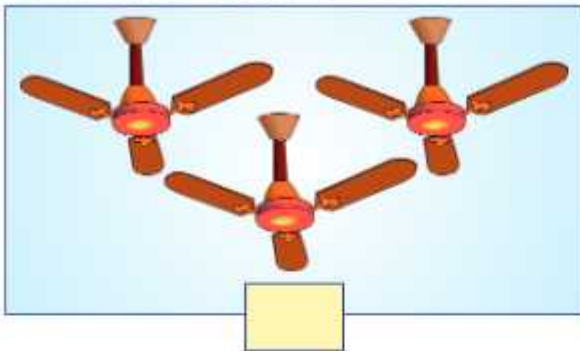| 6	7	8	9

Write numbers 6 to 9 :

6 7 8 9

The teacher will tell the students to do practice of these numbers in their note book.

Count and Write :

Join the numbers in serial order and decorate the picture with colours.

1 2 3 4 5 6 7 8 9

Just before, Just after

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Ahil | Gurfateh Singh | Simran | Kuljeet | Pinki | Aslam | Jyoti | Rano | Sandeep |
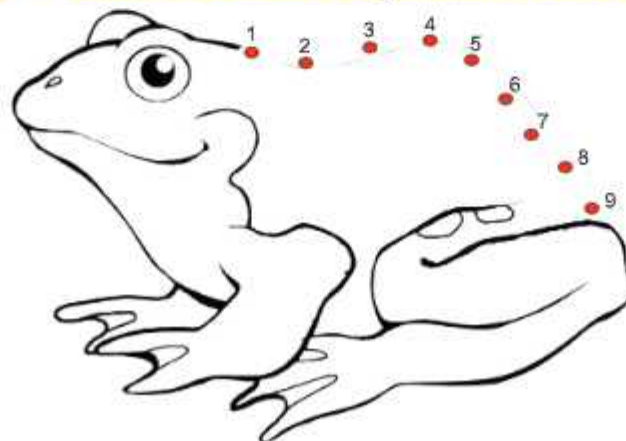
Who is standing just after Simran ? → Kuljeet

Who is standing just before Pinki ? → Kuljeet

Who is standing between Simran and Pinki → Kuljeet

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

Look at the number strip

What comes after 7 ? → 6

What comes after 8 ? → 9

Very good

What comes before, what comes after, what comes in between. let us try to understand it and know about forward backward counting.

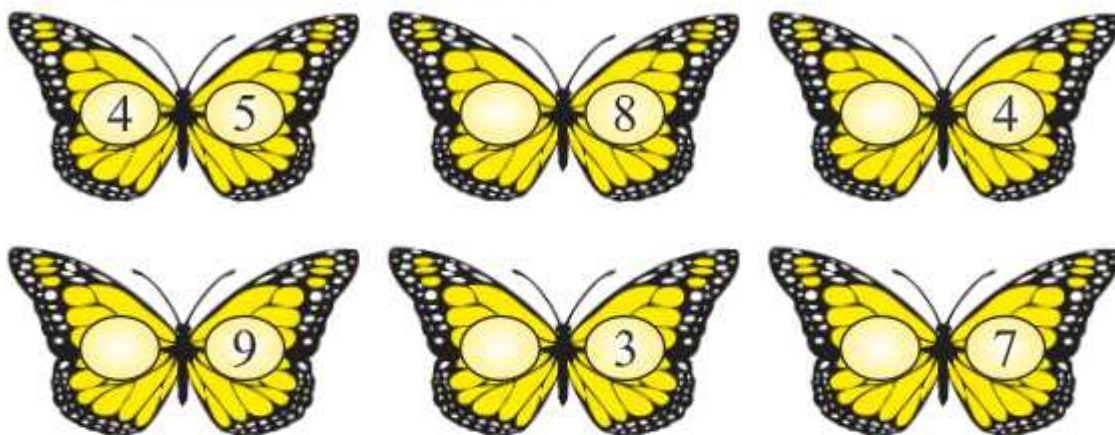**1. What will come just before ?**

| 4 | 5 | | 8 | | 4 |
| 9 | | 3 | | 7 |

2. What will come just after ?

| 6 | 7 | | 5 | | 8 |
| 1 | | 3 | | 6 |
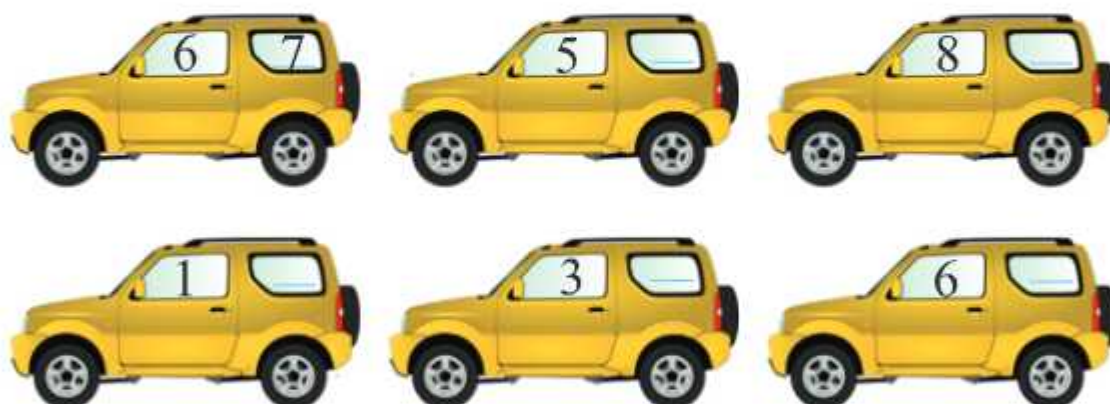
3. What will come in between ?

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

4. Count the objects and write the number in red box and write its next number in the green box.

5. Count the objects and write the number in red box and write its previous number in green box.
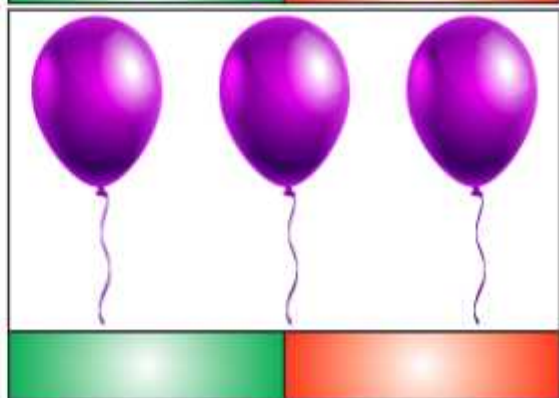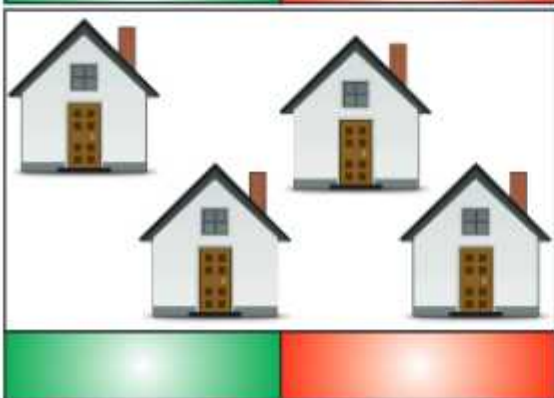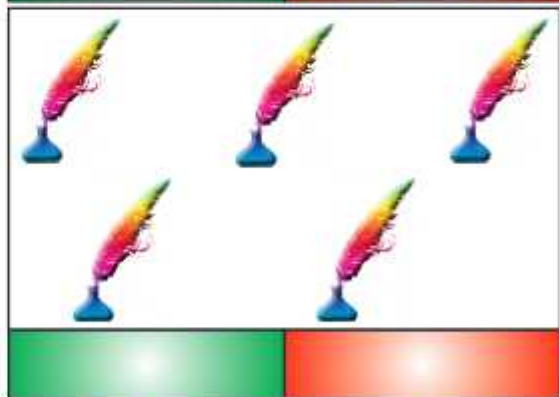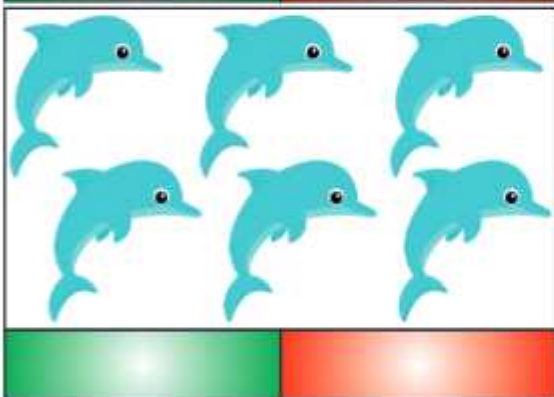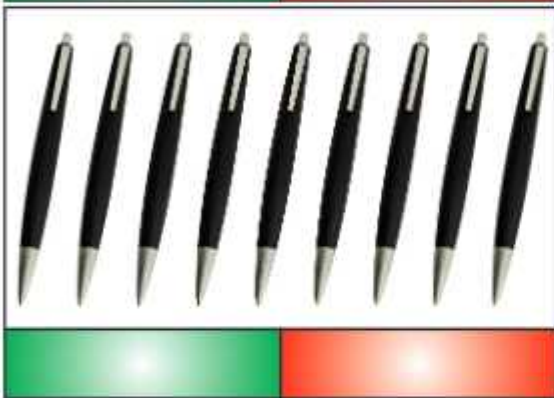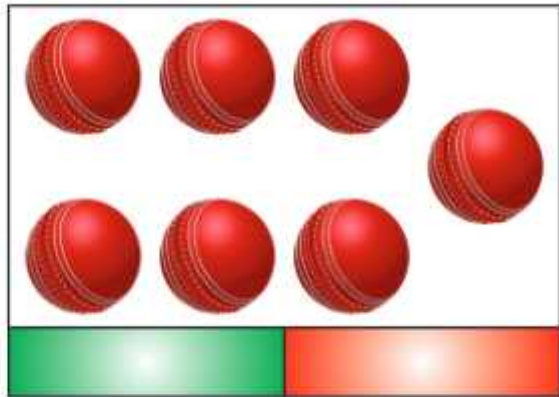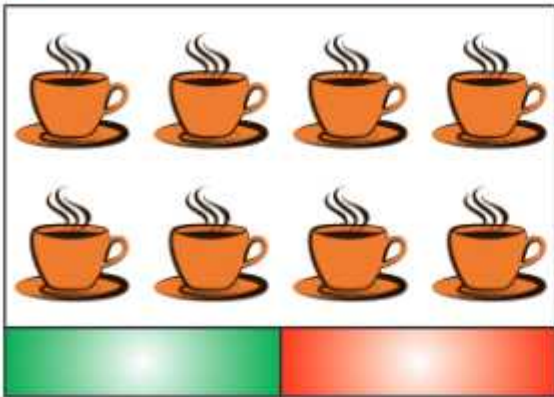
Comparison of numbers

The teacher will take some chalks in his/her hand and will ask the students to estimate the number of chalks he/she will ask the students to tell which hand has more number of chalks and which has less number of chalks.

Which of my hand has more number of chalks ?

?

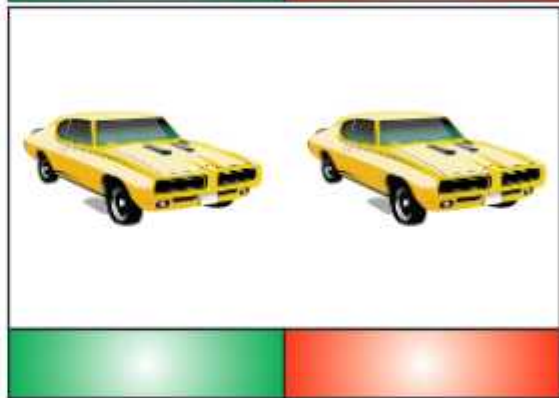Let us see that which hand has more number of chalks.

How many chalks are there in my left hand and in my right hand ?

There are 3 in left hand.

There are 2 in right hand.

Which hand has more chalks ?

Left hand has more chalks ?
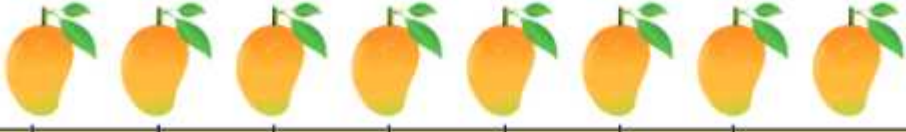
Note The teachers will ask the students to do the activity given above with different objects and different quantity. The teacher will tell the students about greater or smaller numbers on blackboard.

After matching each one of the things in the boxes below, find more or less.

Put a (✓) on the box having more and put a (×) on the box having less.

1.

2.

 Let's do

1.

2.

Let's learn

Tick (✓) the things which are less than 5 in number.

(seven flower pots)	
(six pencils)	
(four sharpeners)	✔

Let's do

1. Tick (✓) the things which are more than 5 in number.

(four mangoes)	
(six apples)	
(five clocks)	

2.

Understand the greater and smaller number and encircle the greater number

| (8) | 3 | | 2 | 5 | | 4 | 3 |

| 8 | 7 | | 9 | 6 | | 3 | 8 |

3.

Understand the smaller and the greater number and encircle the smaller number

| 9 | (6) | | 3 | 5 | | 9 | 2 |

| 7 | 5 | | 4 | 6 | | 2 | 27 |

Note The teacher will make his students understand that they should respond more or less objects by counting and then the students will encircle the greater or smaller numbers.

27

Equal

Five fingers of left hand

Five fingers of right hand

It is neither more or less

These are equal

Let's do

Count and write backward counting from 9 to 1 :

8 9
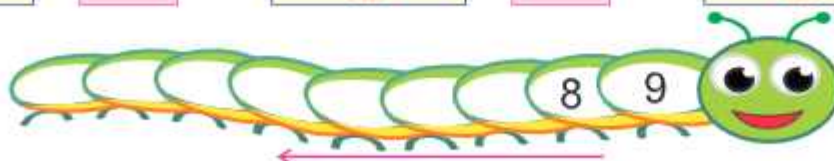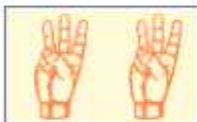
Note The teacher will explain the concept of backward counting by moving backward while counting with his foot steps. Then the teacher will impart the concept of backward white counting with the help of fingers/objects by subtracting.

28

Join the points by backward counting and help Avneet to reach his uncle's house

Avneet Singh

9.

7.

5.

8.

6.

3.

4.

1.
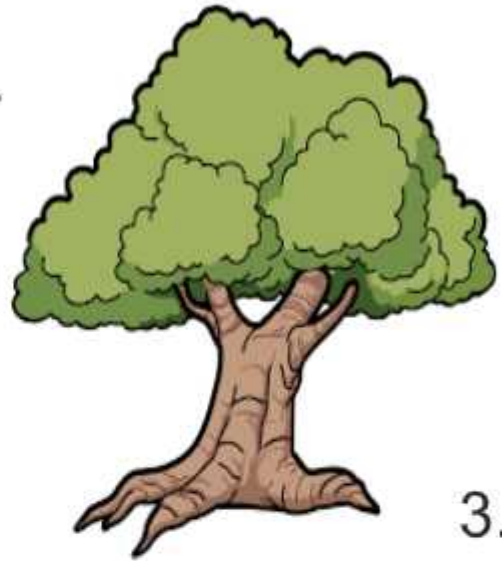
2.

Note To reach at uncle's house touch all the numbers through backward counting written here and speak them loudly. The condition is that these numbers should be joined by lines and care must be taken that lines should not cut or intersect each other.

Knowledge of zero

How many pencils do I have?

2 pencils

After keeping one pencil aside.

Now how many pencils do I have?

1 pencil

After keeping one pencil aside

Now how many pencil do I have?

Nothing

In number, if we have nothing then it means we write it as '0'

Let's do

How many books are on table?
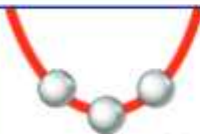
..........beads   ....beads

.... flowers   ....flowers

..............mangoes   ....mangoes

Note The teacher should explain the use of 'Zero' with the help of objects present in the school.

1. Write counting 1 to 9 :

1
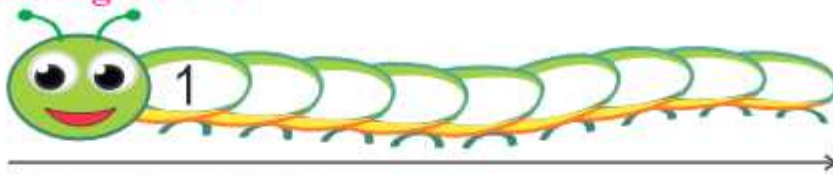
2. Encircle the greater number :

3	4
9	6

2	1
7	9
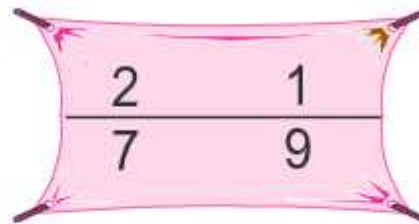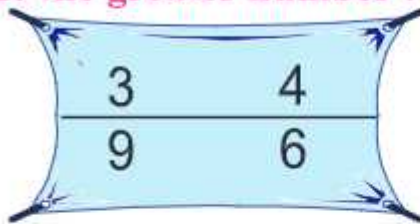
3. Fill in the blanks :

___	8
___	5

7	___
4	___

7	___	9
4	___	6
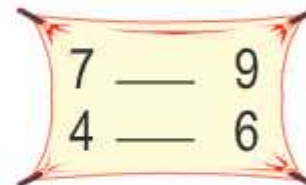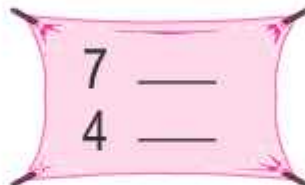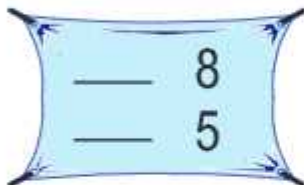
4. Write backward counting 9 to 1 :

9
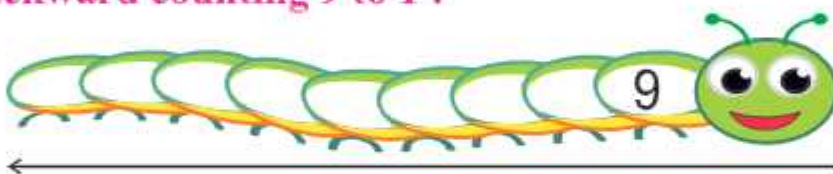
5. Encircle the smaller number :

3	5
7	9

8	6
9	8
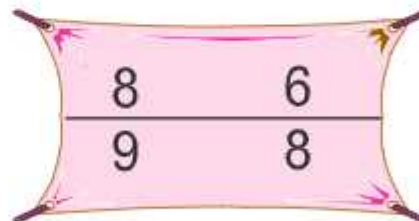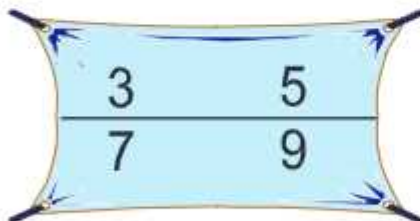
6. Count and write :

Activity

One more

One green parrot suffering from flu
other pays a visit, now they are two

Two green parrots now sitting on the tree
another came to join them, now they are three

Three green parrots want a more
another came to give them, now they are four

Four green parrots looking for beehive
One came to tell them, now they are five
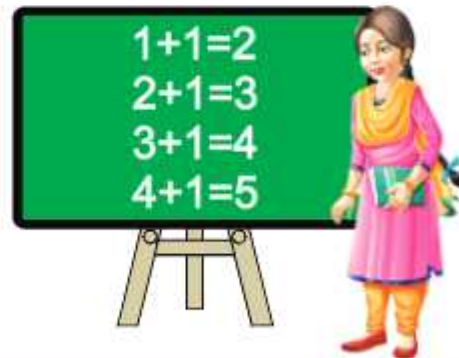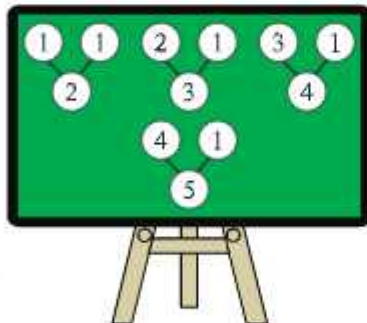
$$1+1=2$$
$$2+1=3$$
$$3+1=4$$
$$4+1=5$$

Note   The teacher will do this activity with the student's participation so that they can understand the concept of one more. By reciting the above poem, the concept of one digit addition is imparted to students.

One less

Five pigeons on a tree want to eat more
One flew to eat something, rest left are four

Four pigeons are on a tree want to eat pea
One flew to eat it, rest left are three

Three pigeons on a tree eating in queue
One flew to eat something, rest left are two

Two pigeons on a tree want to eat bun
One flew to eat it, rest left is one

One last pigeon now dancing like a hero

It also flew to eat something, rest left is zero
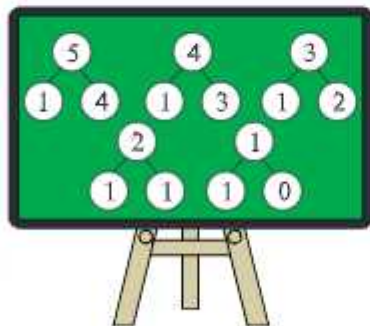
$$5-1=4$$
$$4-1=3$$
$$3-1=2$$
$$2-1=1$$
$$1-1=0$$

Note The teacher will do this activity with the student's participation so that they can understand the concept of one less. By reciting the above poem, the concept of one digit subtraction is imparted to students.
Using the blackboard, the teacher will explain the concept of subtraction and also uses the sign of subtraction '−'

Jorh-Torh upto 5 with fingers :

Mam, I had one pencils
My mother gave me one more.
Now I have 2 pencils.

Yes, now tell me how
many fingers are raised
and how many fingers are folded.

2 raised

3 folded

Good, Let's count by
folding the fingers.

Let's do

Count and write the fingers of your hand as shown by folding and then by raising and folding fingers.

Raised ☐ Folded ☐   Raised ☐ Folded ☐   Raised ☐ Folded ☐

Raised ☐ Folded ☐   Raised ☐ Folded ☐   Raised ☐ Folded ☐

Note The teacher will raise his fingers one by one and then ask for counting of fingers in raising position and folding position. Repeat this activity many times so that the students are able to do jorh-torh numbers upto 5.

The concept of Jorh-Torh (add-split) with the help of sliding card :

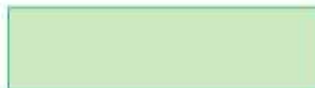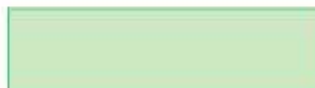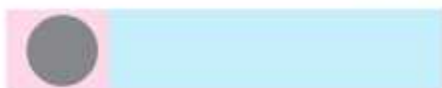How many dots are on the card ?

Now, how many dots are there ?

Mam, 5

Mam, 3

Let's do

	Under the card	Outside the card
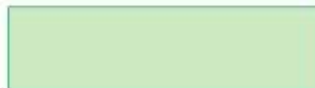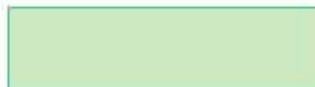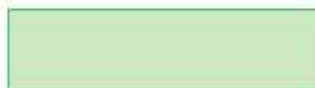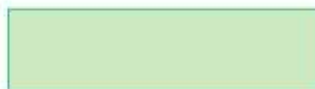
Note Sliding cards are available at the end of the book. The teachers should cut these cards and ask the students for addition subtraction. To prepare sliding card and blank sliding card by using chart sheet as given in last pages. The teacher should use it for several days. The teacher will also ask students about the dots outside and below the slides.

Jorh-Torh of 5 with solid objects :

(4 pencils)	4 1	4 1 ⭕	(1 pencil)
(3 pencils)	3 2	3 2 ⭕	(2 pencils)
(2 pencils)	2 3	2 3 ⭕	(3 pencils)
(1 pencil)	1 4	1 4 ⭕	(4 pencils)
(5 pencils)	5 0	5 0 ⭕	
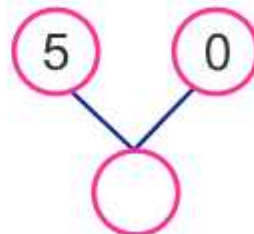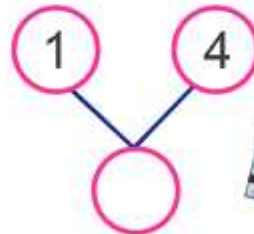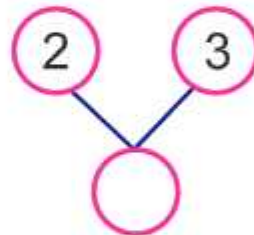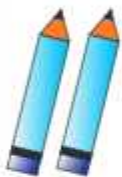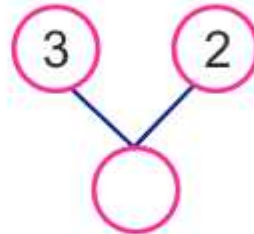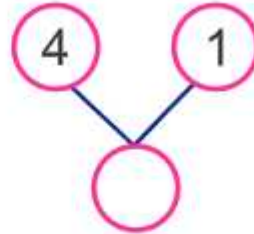
Note The teachers will show 5 solid objects to the students by dividing them in both hands and will ask the students to do the same. They will also write it on the blackboard.

Let's do

5 → 3, 2	5 → ○, ○	○ → 4, 1
6 → 4, 2	6 → ○, ○	○ → 3, 3
7 → 4, 3	7 → ○, ○	○ → 2, 5
8 → 5, 3	8 → ○, ○	○ → 7, 1
9 → 5, 4	9 → ○, ○	○ → 6, 3
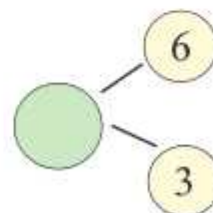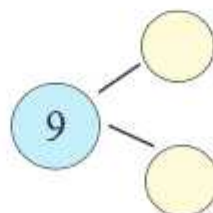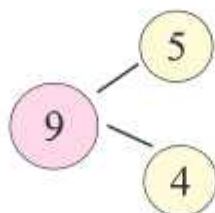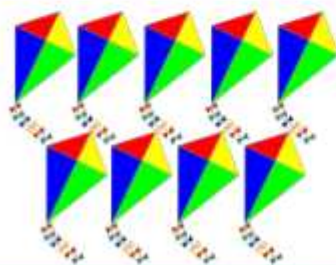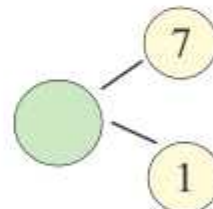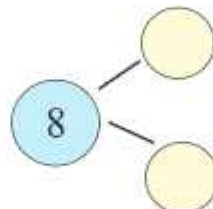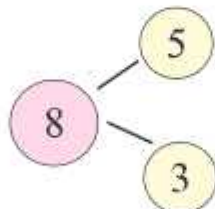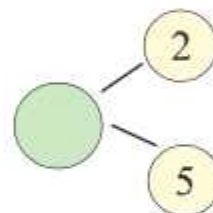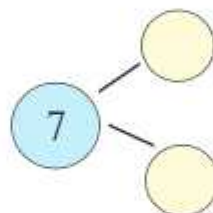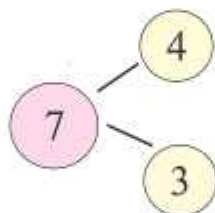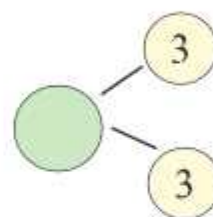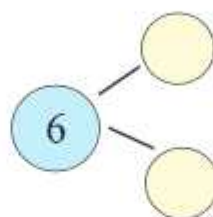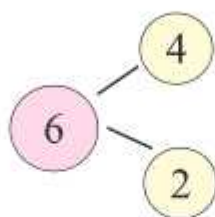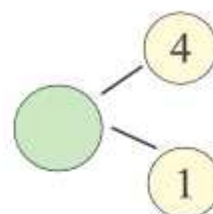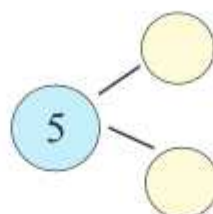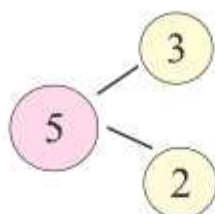
Note The teacher will give solid objects like pencils, sticks etc. to the children ask them to do jorh-torh of the numbers 5 to 9.

Write the numbers in different ways.

8	
7	1
5	3
4	4
3	5

7	

9	

6	

5	

Statement Sums
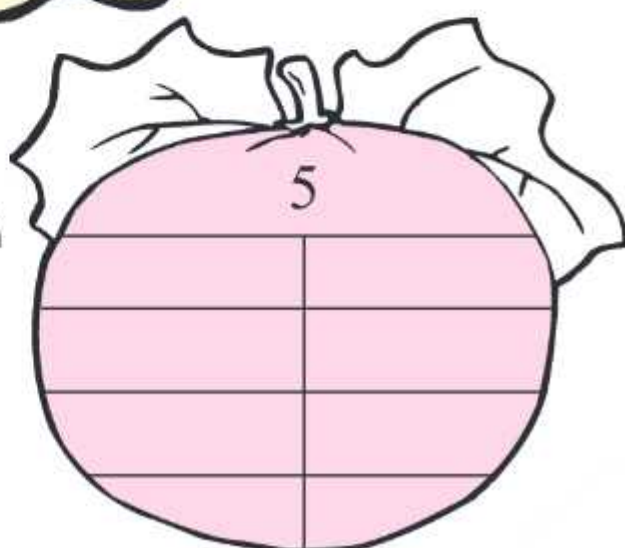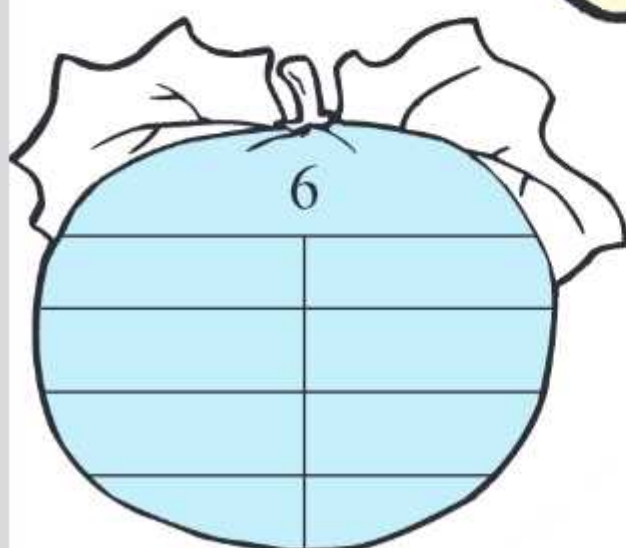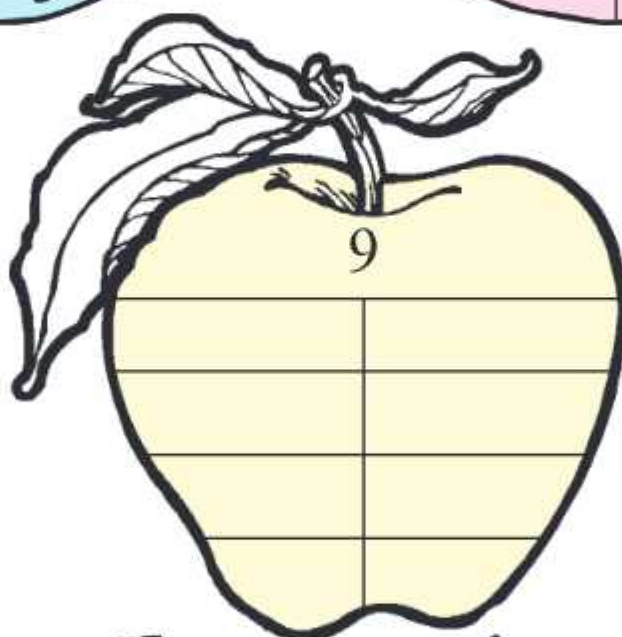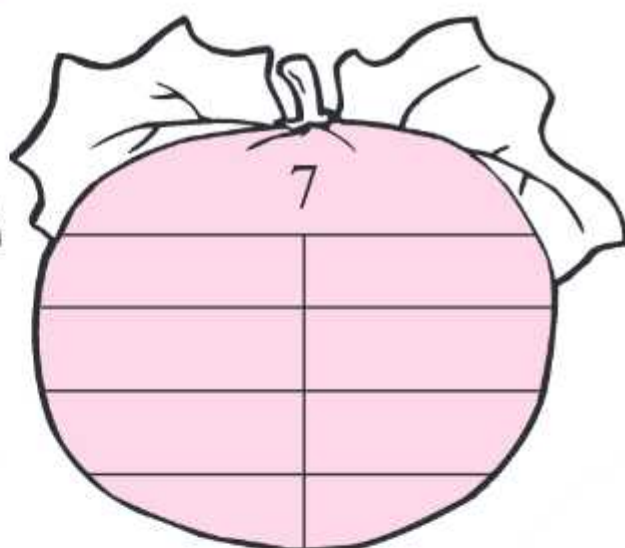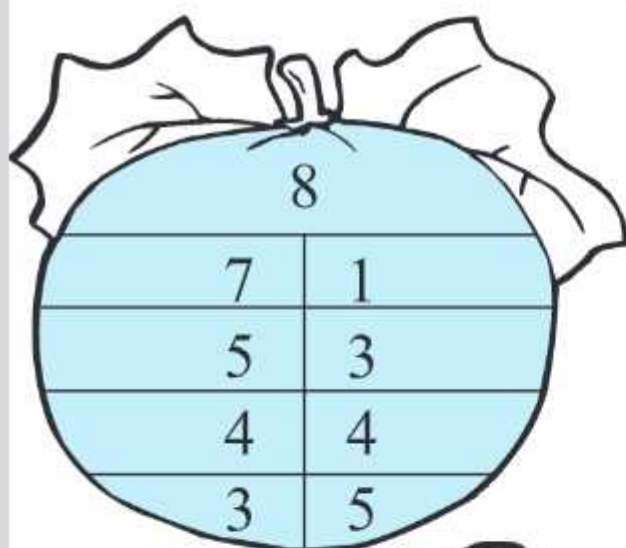
Let us understand, when we add or take out some pencils from the group of pencils, what will happen ?

1. **Harjot has one pencil. Baljeet gave him one pencil more. How many pencils Harjot has how ?**

$$/ \; + \; / \; = \; // \qquad 1 + 1 = 2$$

2. **Harjot has two pencils. He got two more, then how many pencils he has now ?**

$$// \; + \; // \; = \; //// \qquad 2 + 2 = 4$$

3. **Harjot has 4 pencils. He gave two pencils to Baljeet. How many pencils Harjot has now?**

$$//// \; - \; // \; = \; // \qquad 4 - 2 = 2$$

4. **Baljit had 2 pencils. Lucky gave him 2 more pencils and Harjot gave 1 more pencil to Baljit. How many pencils does Baljit have now?**

$$2$$

$$2$$

$$1$$

—————————

$$5$$

—————————

1. There were 5 fish in water. Two more fish are added. Now how many fish are in water ?
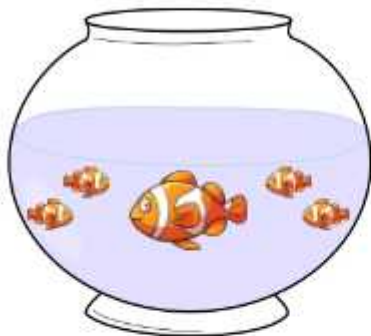
[ ] Fish   [ ] Fish

2. There were 5 birds on the tree. Four more birds came there. Now how many birds will be on the tree ?

[ ] Birds   [ ] Birds

3. Three children are playing on the slide. Two more children join them. How many children are there now ?

[ ] Children   [ ] Children

4

3

+

7

Method-

1 + 4

Step 1. Start with jump from number 1.
Step 2. Jump forward according to the numbers which we have to add.
Step 3. Now write the numbers by forward counting.
Step 4. $1 + 4 = 5$

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

1

1 2 3 4 5

1
+ 4
5

$1 + 4 = 5$

Let's do

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

+

+

+
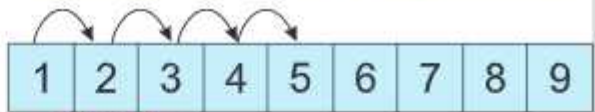
$4 + 1 = \boxed{}$
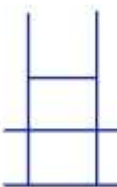
$1 + 3 = \boxed{}$

$3 + 1 = \boxed{}$
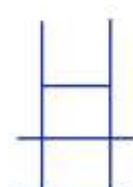
Note The teachers will ask the students to solve sums according to the given number by counting forward on number strip.

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

4

3

–

___

1

Method-

5 - 1

Step 1. Jump from the given number 5.
Step 2. Jump backward according to the number you want to subtract.
Step 3. Write the number by backward counting.

Step 4. $5 - 1 = 5$

☐ 5

4 5

5
– 1
___
4

$5 - 1 = 4$

Let's do

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

–

–

–
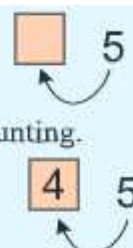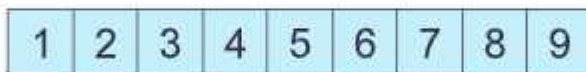
$4 - 1 = \boxed{}$
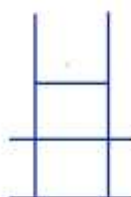
$5 - 3 = \boxed{}$

$3 - 1 = \boxed{}$

Note The teachers will ask the students to solve sums according to the given number by counting backward on the number strip.

Properties of Addition - Subtraction

By adding 1 we get the next
(successor) number.

1 + 1 = 2	8 + 1 = 9	5 + 1 =	4 + 1 =

Addition of digits in any order, gives the same result.

2 + 3 = ☐ = 3 + 2	1 + 2 = ☐ = 2 + 1	3 + 4 = ☐ = 4 + 3

When we add 0 in any number,
we always get the same number.

1 + 0 = 1	8 + 0 = 8	5 + 0 =	4 + 0 =

When we subtract 1, from any number we get the previous (predecessor) number.

2 − 1 = 1	8 − 1 = 7	5 − 1 =	4 − 1 =

When we subtract two same numbers, we get 0.

9 − 9 = 0	8 − 8 = 0	5 − 5 =	4 − 4 =

When we subtract zero from any number, we get the same number.

2 − 0 = 2	8 − 0 = 8	5 − 0 =	3 − 0 =

If we add or subtract zero
from a number.
We get the same number.

As many eaten by Aman,
same will be eaten by Raman.
Tell how many will.
be taken by Daman.

Anything fetched by Daman,
Divide in parts of two.
Raman also gets equal parts,
by making equal queue.

Let's do
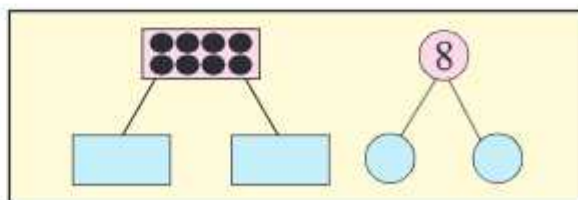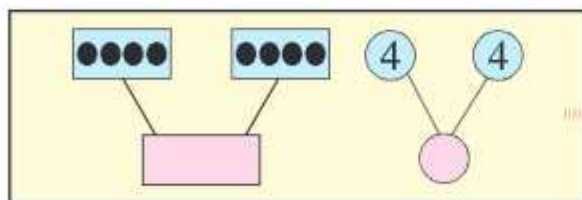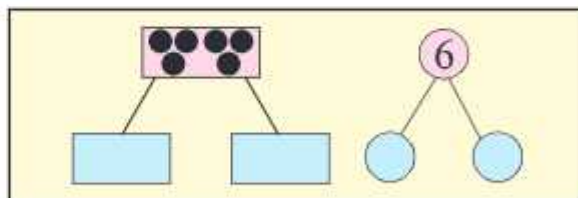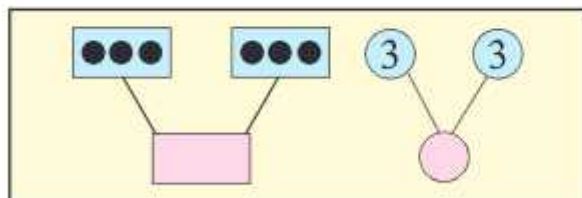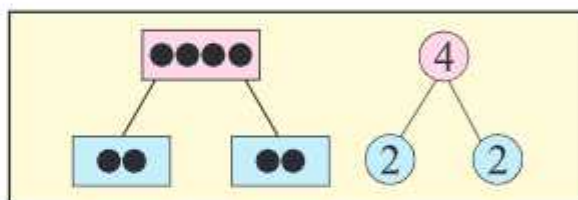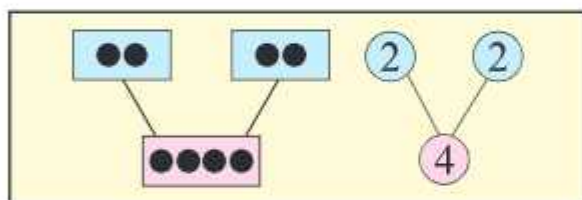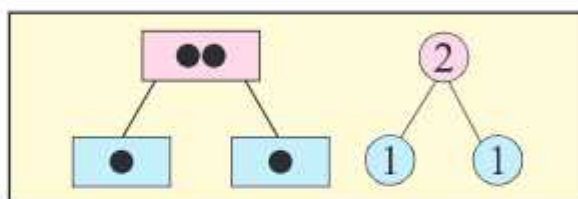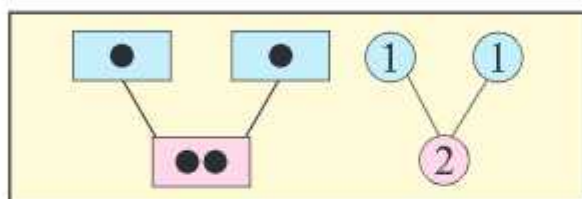
Note The teacher will make the students learn how to double any number and how to divide a number into two equal parts with the help of solid objects and a story.

Objective : Recognition of numbers.

Material : Marker, Chart.

Method : 1. Write as demonstrate below.

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

	8	7	9			9	7
7		4	1	6	8	4	6

	9		8				8
5		3	6		9	5	6

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

2.   Ask the child to think of any number upto 9.

3.   Ask the child to find in how many boxes can he find his number.

4.   Then answer the question.

5.   It is a magic for child.

Note Count the boxes in which number comes. The number of boxes will be the answer.

1. Add :

3 + 2 =	5 + 0 =	2 + 1 + 2 =

2. Subtract :

5 − 2 =	5 − 0 =	3 − 1 =

3. Encircle the correct answer :

6
7
8

4
2
3

4. Fill in the blanks :

1 + ☐ = 5   ☐ + 2 = 3   1 + 2 + ☐ = 5

4 − ☐ = 3   3 − 1 = ☐   5 − ☐ = 4

5. Think and do :

5 + 1 =   6 + 2 =

6 - 1 =   6 - 5 =   8 - 2 =   8 - 6 =

Note The teacher will assist the students to practice the above given Addition-subtraction sums.

Things to Remember

- Smallest number of 1 digit = 1
- Greatest number of 1 digit = 9
- Sign of Addition '+'
- Sign of Subtraction '−'

We have learnt

Counting of numbers 1 to 9
(With solid objects and with fingers)

↓

Reading, Counting,
Writing of numbers, forward/backward
counting, comparison of numbers

(Using fingers, sliding card,
solid objects and maan card)

↓

Forward Counting, Backward
Counting and in between of numbers
(By activities)

↓

Comparison
(With solid objects)

↓

Addition - Subtraction upto 9

↓

Addition - Subtraction of 1 digit numbers

(Estimate, oral type, word type problems using a number strip.)